

# TRANSPORT STRATEGY

#### **SUMMER 2021**

Interactive PDF: best viewed on a computer screen



#### **Garden Town Introduction**

Harlow and Gilston was designated as a Garden Town by the Ministry for Homes, Communities and Local Government (MHCLG) in January 2017 and will comprise new and existing communities in and around Harlow.

Set in attractive countryside, with transformative investment in transport and community infrastructure, new neighbourhoods to the east, west and south and new villages to the north (collectively referred to as the new Garden Communities) will be established and integrated with the existing Harlow town.

The Harlow and Gilston Garden Town (HGGT) Partnership describes the cross boundary joint working arrangements between East Herts District Council (EHDC), Epping Forest District Council (EFDC) and Harlow District Council (HDC) working together with Essex County Council (ECC) and Hertfordshire County Council (HCC) to ensure plans for the Garden Town deliver on their agreed HGGT Vision.

Revision	Date	
01	January 2019	
02	XXXX 2021	











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# TRANSPORT STRATEGY **IN BRIEF**

MODE SHARE OBJECTIVE

of all trips starting and/or ending in the existing settlement area of Harlow Town should be by active and sustainable travel modes and

of all trips starting and/or ending in the new Garden Communities of Harlow & Gilston
Garden Town should be by active and Garden Town should be by active and sustainable travel modes.

# **PRINCIPLES**

#### USER HIERARCHY

Decisions should be shaped by the transport hierarchy shown here, to provide an equitable, balanced, safe, coherent, healthy and efficient transport network that promotes modal shift and sustainable travel.

#### A CULTURE OF ACTIVE AND **SUSTAINABLE TRAVEL**

The Garden Town should be an environment where active and sustainable travel is valued, prioritised, and supported to ensure that their social, environmental, health and economic benefits are available to everyone.

#### **ACCESSIBILITY AND INCLUSION**

Infrastructure should be designed for everyone and with consideration of those with greatest need first. Everyone should have the opportunity to choose more sustainable and active modes of travel.



'Harlow and Gilston will be a joyful place to live with sociable streets and green spaces; local centres accessible by walking and cycling; and innovative, affordable public transport. It will set the agenda for sustainable living. It will be adaptable, healthy, sustainable and innovative."

# **ACTIONS**

#### **ENABLING CHOICE**

...means creating connected local communities that offer local facilities and travel options for everyday activities.





#### STREETS FOR PEOPLE

...means making our streets and neighbourhoods places that are safe, sociable and enjoyable for everyone by creating attractive places that people want to walk and

#### **QUALITY PUBLIC TRANSPORT**

...means connecting people to the places they want to go, providing independence and mobility to those who need it most, while reducing air pollution and congestion.





#### A NETWORK THAT WORKS

...means providing reliable, high-quality alternatives to private vehicles whilst ensuring the network effectively supports those that depend upon it for essential journeys and services.

#### MAXIMISING OPPORTUNITIES

... means exploring and introducing new and innovative transport technologies as they develop



# **HOW TO USE THIS STRATEGY**

#### **WHY**

This Transport Strategy has been prepared to help deliver the HGGT Vision against the backdrop of the challenges of future travel demand linked to planned growth. The Local Plans of East Hertfordshire, Epping Forest and Harlow District Councils include shared commitments to secure the delivery of sustainable growth through cooperative cross-boundary working. The growth strategies of these Local Plans emphasise the need for an integrated Garden Town that promotes the use of active and sustainable travel.

The HGGT Transport Strategy establishes a clear Mode Share Objective and set of Principles which aligns with the growth strategies (including the planned delivery of 23,000 homes within the Garden Town) within the respective Local Plans. The Strategy sets out how this planned growth can be achieved through modal shift towards sustainable and active travel and details a number of measures to achieve this modal shift and the ambitious targets proposed for sustainable travel.

#### **WHO**

The <u>HGGT Partner Councils</u> has developed this Strategy to ensure openness and accountability with all stakeholders, including existing and future communities, which it will achieve through engagement, consultation and partnership working.

#### **Residents and Local Interest Groups:**

This document can be used by residents and local interest groups to understand how transport is being prioritised and incorporated into the existing town and new developments. It can be used to hold Developers, and the HGGT Partner Councils to account in terms of alignment of designs and investment with the Mode Share Objectives and Principles in this strategy.

#### **Stakeholders and Businesses**

HGGT will support and work with businesses,

transport operators, service providers and other stakeholders by using this Strategy to inform discussions, designs and projects to help align the transport needs of these stakeholders with the Mode Share Objective and Principles outlined here.

#### **Local Authority Officers and Decision-Makers:**

This document will be endorsed by the Garden Town Partners as a material planning consideration and will help to guide the assessment of planning applications for developments coming forward within the Garden Town area. It will inform pre-application discussions and assist decision-makers in transport matters.

In addition to cross-boundary working through the HGGT partnership, the Councils are committed to working with relevant organisations, service providers and community groups to ensure proposals are developed collaboratively and with consideration of local priorities.

#### **Developers:**

The document is to be used by developers and their agents, design teams, consultants and contractors in shaping development proposals and transport measures based on the transport hierarchy. This strategy will guide the design of proposals and ensure coordinated and integrated consideration of active and sustainable transport principles and mode shift targets at an early stage.

#### WHEN

#### **Ongoing Provision and Maintenance**

The ambition, Mode Share Objective and Principles in this Strategy should help shape existing and future work programmes of the Highway Authorities across the Garden Town, and can provide supporting justification for funding submissions and spending commitments in relation to transport.

#### **Pre-Application**

This Strategy and its supporting evidence base should

inform pre-application discussions to incorporate sustainable transport measures from the outset that will uphold the mode share targets outlined here.

#### **Masterplanning**

This Strategy should be used to inform the early stages of masterplan designs to embed the transport hierarchy, prevent abortive work at later stages, and shape a holistic approach to building strong and integrated communities.

#### **Planning Application**

Planning applications will be scrutinised by the local planning authorities for the Garden Town to ensure they demonstrate a close alignment with the Mode Share Objective and Principles in this Strategy and the planning applications will achieve the sustainable mode share targets.

#### **Post-Planning**

Planning conditions and Section 106 obligations will be utilised where appropriate to ensure that active and sustainable transport measures are secured to ensure delivery of transport infrastructure and associated measures and mitigations connected with any planning applications for development in the Garden Town. Monitoring of the Mode Share Objective set out here on a regular basis is key, and it is expected that any adopted measures will be regularly reviewed to ensure the aspirational mode share targets are being met.

#### HOW

The Strategy should be used to inform and guide decisions on planning applications for new developments, regeneration, infrastructure and development of services to ensure designs and schemes are brought forward in accordance with the transport user hierarchy and will support progress towards the Mode Share Objective.

The Strategy outlines how growth in the Garden Town can be enabled through the Mode Share Objective and Principles, and signposts users to supporting evidence and best practice. It is not intended to provide the detailed action plan or timeline for proposed measures. However, a high level programme can be found in the supporting information.

Further information is provided via links embedded within the text, through interactive pop outs or through the supporting information provided on the website

#### WHAT

This Strategy has been approved by the Garden Town Member Board, and had formal Cabinet/Executive endorsement from Councillors from East Herts District Councils, Epping Forest and Harlow. It has had approval by the relevant portfolio holders of Essex and Hertfordshire County Councils.

Local Plan policies and allocations for each of the District Councils, and the transport policies of the County Councils, will continue to be used to shape and assess development proposals across the Garden Town

The HGGT Vision and HGGT Design Guide (November 2018), and this Transport Strategy, will be material planning considerations ensuring the Garden Town is delivered in a co-ordinated, inclusive and sustainable way. This Strategy should also be read in conjunction with the HGGT Sustainability Guidance (2021) and Infrastructure Delivery Plan (April 2019).

#### MONITORING AND REVIEW

This Strategy will be reviewed and updated periodically to reflect new information and progress in relation to planning and delivering the targets, and to take account of feedback from stakeholders.

Supporting evidence and 'How To' Guides may periodically be reviewed, please check the HGGT website for the latest version of all HGGT resources.

### CONTEXT

#### **HGGT GROWTH**

Significant Garden Town growth is planned for housing and employment on development sites both within the boundaries of East Hertfordshire Districts and Epping Forest, and within the existing town of Harlow, where further regeneration, renewal and changes of use are anticipated during the period of the relevant Local Plans.

In total, approximately 23,000 new homes are anticipated to be delivered across the Garden Town area over the next 15 years and beyond. This Strategy has a critical role to play in bringing together established and new communities as a fully integrated Garden Town with an effective transport network.

#### **NATIONAL POLICY CONTEXT**

The framework of national policy and guidance requires that growth achieves and delivers a significant mode shift. The UK Government recently released the <a href="Decarbonising Transport report">Decarbonising Transport report</a> (July 2021) which reaffirmed and set out a number of ambitions in this regard including:

- Investing £2 billion over five years in cycling and walking with the aim that <u>half of all journeys will</u> <u>be cycled or walked</u> in towns and cities by 2030.
- Supporting the delivery of 4,000 zero emission buses and associated infrastructure while exploring a phase out date for the sale of new non-zero emission buses/coaches.
- A ban on the sale of petrol and diesel cars by 2030 and support for the electrification of vehicles and their supply chains.
- By the end of October 2021, all Local Transport
   Authorities will be expected to have published
   a local Bus Service Improvement Plan, detailing
   how they will use either a franchising model or a
   Quality Bus Partnership to improve their services.

The Town and Country Planning Association (TCPA) have created <u>9 Garden City Principles</u> which form an indivisible and interlocking framework for the delivery of high-quality places. One of these principles clearly states the need for:

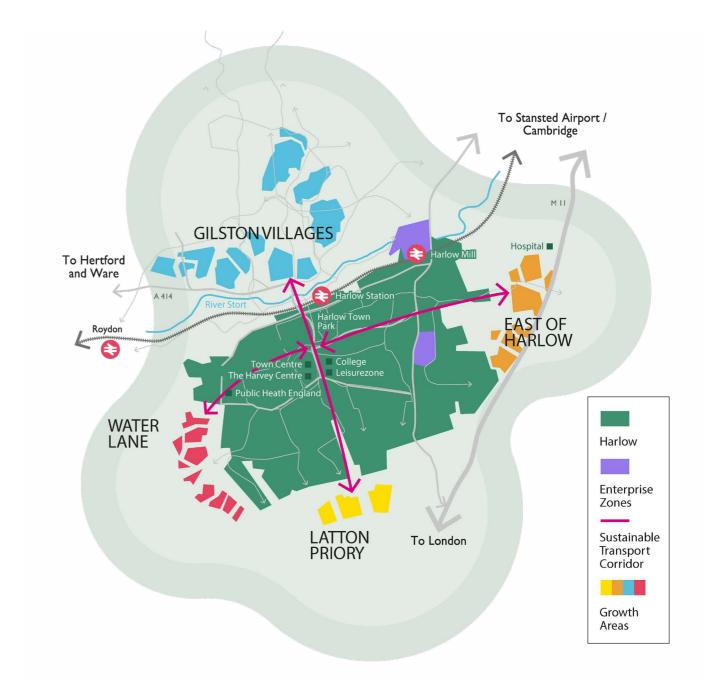
"Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport".

These Garden City Principles are woven into the HGGT Vision and partner Councils Local Plans. These Principles and further work from the TCPA has also been used to inform this Strategy.

The National Planning Policy Framework (NPPF) requires that "the planning system should actively manage patterns of growth in support of the objectives set out below":

- Impacts of development on transport networks can be addressed.
- opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised.
- opportunities to promote walking, cycling and public transport use are identified and pursued.
- environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account.
- patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

The Town and Country Planning Association (TCPA) Garden City ambition states that "walking, cycling and public transport designed to be the most attractive forms of local transport".



CONTEXT

#### **LOCAL POLICY CONTEXT**

This Strategy brings together the policies of adopted and emerging development plans of East Herts (Adopted, October 2018), Epping Forest (Submission version 2017) and Harlow (Adopted, December 2020) District Councils. In planning to meet their growth needs, the District Councils have acted co-operatively, supported by their respective Hertfordshire and Essex County Councils.

The transport strategies for the counties are set out in their respective Local Transport Plans for Hertfordshire and Essex. Find out more about how this Strategy conforms with District and County transport policy in the supporting information.

All five HGGT Partner Authorities have declared a Climate Emergency or committed to Climate Action. This Strategy supports the highest commitment across the Garden Town Authorities: to become Carbon-Neutral by 2030.

#### NATIONAL TRANSPORT CONTEXT

The UK has an advanced transport network which operates across the country and includes a wide range of modes. This network is increasingly roadcentric however, with a continuing rise in the ownership and use of private vehicles and movement of freight by road. However, only 4% of road transport fuel was renewable and there are limited numbers of electric vehicles (55,000 fully electric, 145,000 hybrid). Find out more here.

The current transport system and domination of private vehicles has a number of implications:

- Road transport is a major source of air pollution, linked to around 40,000 premature deaths in the UK each year.
- Physical inactivity costs the NHS <u>£1bn per annum</u>, with further indirect costs calculated at £8.2bn.
- Transport is now the <u>largest contributor to UK</u> <u>greenhouse gas emissions</u> (28% of domestic emissions, of which 90% is road transport), worsening the climate emergency.
- Congestion increased by 4% and 1% on the strategic road network and A roads from 2017-18.
- There were 1,784 reported road deaths in 2018, which is unchanged since 2012.
- Nine in ten drivers recorded feeling <u>stressed or</u> <u>angry</u> when driving, up 6% on figures from 2020
- The cost of buying and running a private vehicle are prohibitive for some and far higher than other modes average annual cost of using a car (£3,727), bus (£848) and bike (£396).

Covid-19 has impacted travel patterns which relate closely to environmental, social, and economic inequalities. Now more than ever, high quality, sustainable and resilient design and development is needed to ensure that transport solutions are adaptable, sustainable and equitable over the long term.

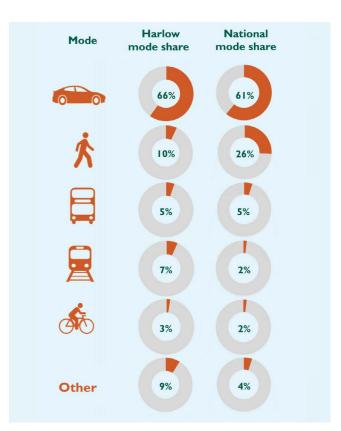
#### LOCAL TRANSPORT CONTEXT

HGGT Partner Councils are well placed to provide a healthy and well connected environment for the existing and future residents, visitors and workforce of the Garden Town. There is already transport infrastructure across Harlow that can be improved to support delivery of the Mode Share Objective set out in this Strategy. HGGT is a significant development area within the **UK Innovation Corridor** (London - Harlow - Cambridge). The MII motorway to the east, and the West Anglia Main Line to the north, link Harlow to the other key hubs in this corridor. The A414 is a busy east-west arterial connection between Essex and Hertfordshire. To the south, Epping provides a popular connection to London on the underground network. Harlow data indicates that transport is hugely important moving forward:

- There is good town-wide accessibility by all modes, with bus services and bus priority on some routes, extensive segregated footways and cycleways and a pedestrianised town centre.
- Harlow has high levels of private car use (5% greater than the national average).
- 13% of the resident population walks or cycles to work and 84% for any reason (vs. 87% UK average) even though there is a relatively good walking and cycling network.
- Harlow has a comprehensive local bus network, with around 40 daytime bus routes, run by six operators.
- Health: 25% of Harlow adults were classified as physically inactive and 37% of Year 6 pupils were classified as overweight or obese – both above county and national averages. Harlow has the highest ratio across Essex for emergency admissions due to Coronary Heart Disease.
- Deprivation: Harlow is ranked 2nd across Essex for overall deprivation and is in the bottom

40% nationally. 29% of Harlow households have an income of less than £20k. 40% of low income households lack access to a car, making alternatives vital.

- Travel to key services: Harlow residents have the lowest average travel time (14.5mins), in Essex by walking and public transport for 8 key services including employment, education and food stores.
- Collision data indicates that Harlow has relatively few cycle collisions when compared to Essex but the second highest fatalities (2012-17).



Mode share in Harlow, based on Census 2011 travel to work data. 'Other' includes: Working from home (7%), taxi (1%), moped/motorcycle (1%).

# MODE SHARE OBJECTIVE

The Transport Strategy is driven by an overriding Mode Share Objective:

50%

of all trips starting and/ or ending in the existing settlement area of Harlow Town should be by active and sustainable travel modes and

60%

of all trips starting and/or ending in the new Garden Communities of Harlow & Gilston Garden Town should be by active and sustainable travel modes.

#### Why 50-60%?

The scale of growth and development proposed for the Garden Town provides the opportunity to deliver a significant step change in active and sustainable travel across the town. Increasing the use of sustainable transport will provide opportunities for new and enhanced public transport services into the future.

This investment in travel choice for residents, workers and visitors, to achieve the Mode Share Objective, reduces the impact on the existing public highway from all new developments and from the existing town, preserving capacity in the network. This allows the new developments to be delivered without negatively impacting on the ability of the public highway to operate safely and acceptably, whilst also contributing positively to health, wellbeing and environmental quality across the Garden Town.

The mode shift targets have been informed by Garden City Principles, evidence and national policy guidance and targets. The Town and Country Planning Association (TCPA) has clearly set out Design Principles for the creation of Garden Towns:

"A Garden City's design must enable at least 50% of trips originating in the Garden City to be made by non-car means, with a goal to increase this over time to at least 60%; and the latest best practice in street and transport design should be used as a minimum standard."

The Department for Transport also set out a **bold** vision for a transformation in our transport system, with the objective that:

"Cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030."

This Transport Strategy aims to deliver sustainable growth and regeneration through its Mode Share Objective, to mitigate some of the adverse impacts of increasing travel demand, both now and for future generations. The following sections show that embracing Mode Share Objective and Principles in this Strategy captures a vision for a happy, healthy, and economically stable town.



# MODE SHARE OBJECTIVE

#### How long will it take to achieve these targets?

This Strategy outlines the targets to drive ongoing modal shift in the existing town, and even more so in new Garden Communities, given their unique scope and opportunity to embed sustainable transport measures through design and positive travel habits from day one. The targets will be achieved incrementally and will require the implementation of complementary policies, plans, infrastructure and associated services over a over a number of years. However, with the right planning and policy, the 60% mode shift target for the new Garden Communities should be achieved as early as possible from occupation and across the whole Garden Town by 2033.

#### How?

Currently about 20% of trips are made sustainably into, out of and within Harlow . Increasing this will be a challenge but is achievable, particularly in the new communities where complimentary measures, such as those found in the image opposite, will be in place from occupation. The five Action chapters following this will provide more detail on how this target can be met.

The HGGT Partner Councils are not starting from scratch and there is much we are already doing – it is clear that investment is having a positive impact but barriers remain. In this strategy, we set out what those barriers are, and what steps we are going to take to tackle them. In order to really deliver a stepchange in the Garden Town, we must go further, faster. Bold action will help to create places we want to live and work – with better connected, healthier and more sustainable communities.

This is a graphical illustration of the various measures needed to achieve the mode share targets and is not a representative timeline of implementation

# PATH TO ACTIVE AND SUSTAINABLE TRANSPORT

# Wayfinding + Placeshaping Green and pleasant places

#### **Last Mile Delivery**

Cargo bikes, electric vehicles and distribution centres

#### **DRT**

Demand Responsive Transport

### STCs/Highway Infrastructure

Build sustainable transport infrastructure

#### **Zero Emission Vehicles**

Provide infrastructure for zero emission vehicles

#### Hubs

Local transport and community hubs

#### Traffic Controls

Town wide speed limit revue

#### 50/60% Sustainable Transport

#### **Shared Mobility**

Bike share, scooter share and car clubs

#### **Liveable Neighbourhoods**

Liveable streets. Pleasant neighbourhoods that encourage healthy travel

#### **Co-working Spaces**

Places to work and network close to home

### Behaviour Change Programmes

Activities and measures to help encourage active and sustainable travel

#### **Enhanced Bus Partnership**

Negotiate for high quality and innovative bus services

#### **LCWIP**

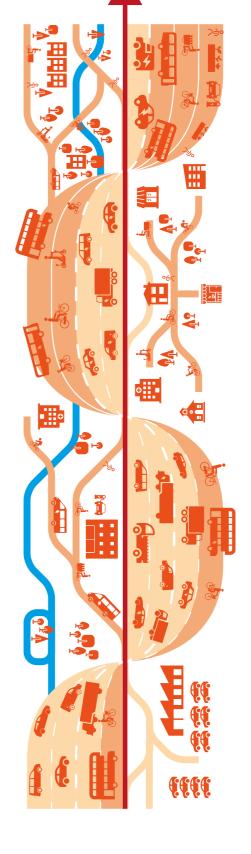
Walking and cycling improvements

# Communication + Engagement

Let people know how and why to travel sustainably

#### **Demand Management**

Reduce unnecessary journeys



### **PRINCIPLES**

The Mode Share Objective will be achieved by applying the following principles to all aspects of transport policy within the Garden Town:

- User hierarchy
- A culture of active and sustainable travel
- 3 Accessibility and inclusion

#### The user hierarchy

This Strategy recognises the need to deliver transformational change, not only to reduce unnecessary journeys, but to make sustainable travel modes a first choice for most journeys for most people. It is also about ensuring that streets are designed to be as effective as possible in bringing communities together, providing leisure opportunities and enhancing people's lives.

All scheme designs should follow the user hierarchy below to deliver the HGGT Vision:

- Reduce unnecessary travel
- Walking and cycling
- Public transport
- Private vehicles

Prioritising local journeys based on this hierarchy of importance will ensure that:

- · First, we minimise demand
- · Then we enable modal shift
- As a last resort, we increase capacity based on these transit priorities.

This hierarchy recognises that, whilst some streets have a significant movement function, and others are enjoyed for their sense of place, all streets should promote safety, accessibility, and inclusion, and prioritise the most vulnerable road users.

This hierarchy is not meant to be rigidly applied in all circumstances and does not necessarily mean that pedestrians and cyclists are more important than the other modes. However, the hierarchy should be applied to design and planning and to masterplans and planning applications for development proposals and a clear rationale should be provided for any exceptions that are made. This helps to ensure that the Garden Town will serve all of its users in a balanced way.

#### A culture of active and sustainable travel

The Garden Town is committed to developing a cultural shift amongst residents where choosing active and sustainable travel is the norm. This means creating an environment where active and sustainable travel is prioritised, valued and supported by all, to ensure the Garden Town is a place where people are empowered to understand, experience and promote the benefits these transport choices bring.

Encouraging new ways of thinking is a challenge and this sort of behavioural change takes time and meaningful engagement to embed. The Garden Town Partners will examine carefully how planning of the built and natural environment, together with a developing programme of behaviour change interventions and effective engagement, can make this achievable. In practice this could mean upgrading a cycleway linked to a school and then offering cycle lessons, bike maintenance and activities at the school to encourage active journeys to school. To support this, the mode shift target has been embedded in wider policy making, such as Local Plans and Strategies.

Improving the built infrastructure and services for existing residents and communities in Harlow is paramount. The aim is to encourage communities to take ownership and become custodians of the Garden Town for future generations, whilst also welcoming new communities who will share the same vision of a sustainable, active and healthy Harlow.

#### **Accessibility and inclusion**

Sustainable and active travel options make access to key services and amenities more resilient and equitable. Everyone should have the opportunity to make sustainable and active travel choices and enjoy the benefits these bring (e.g. less congestion and air pollution, and improved health and wellbeing).

Walking and cycling are not vulnerable to energy and fuel price variations and help to reduce discrimination through socio economic factors including income, ability, gender, disability or race among other relevant factors. People's health depends on the places and conditions in which they live. Therefore, to reduce health inequalities, development and infrastructure should be designed with consideration to those with most need first.

However, take-up in sustainable and active travel can be low despite a large appetite from different demographic groups. For example, 85% of people aged over 65, 78% of disabled people, 76% of women, 75% of people at risk of deprivation and 74% of people from ethnic minority groups never cycle.

It is crucial that the needs and concerns of marginalised groups, disabled people, women and non-users are factored into design and decision-making process in respect to masterplans and planning applications for development. If infrastructure is to be designed for everyone, then genuine representation is needed.

Investment, policy and delivery should be designed to help reduce the health, economic and societal inequities many people encounter throughout their lives. It is essential to remove barriers to peoples' experience of, and interaction with, transport systems and travel.

Diverse stakeholders must be actively included in all processes, from conception, to design, to monitoring outcomes. The interconnectedness of transport means decisions will impact all residents of the Garden Town and therefore a broad range of views should be sought to ensure local expertise, knowledge and input is incorporated from concept and masterplan stages of projects.

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# **ACTIONS**

- Enabling Choice
- 2 Streets for People
- Quality Public Transport
- 4 A Network that Works
- 5 Maximising opportunities



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# ACTION 1:

# **Enabling Choice**

#### **OVERVIEW**

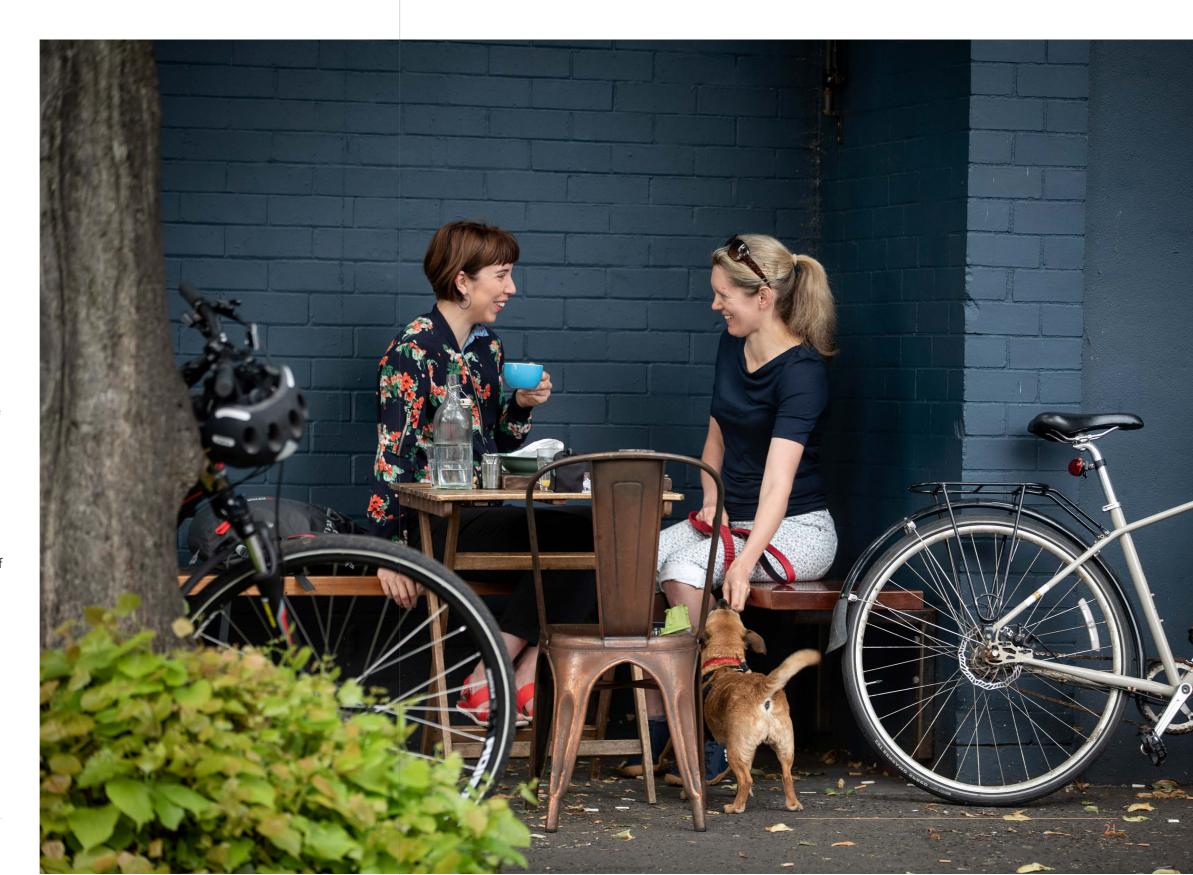
Enabling travel choices means creating connected local communities that offer local facilities and active and sustainable travel options for everyday activities. This gives people the freedom and ability to choose shorter, more sustainable trips and reduces the number, or length, of journeys needed.

Enabling choice starts with policy, place-making and master-planning. Incorporating high quality design, effective technologies and best practice can lessen the demand for long, unnecessary, or motorised journeys. Providing vibrant and local centres that offer everyday activities such as education, retail, health and community facilities, leisure destinations, recreation and open spaces will enable and encourage active lifestyles. Improving facilities, and access to them, key transport interchanges will allow for a range of choices to be provided for different needs, circumstances and seasons.

The original Harlow masterplan had this in mind through the creation of distinct neighbourhoods each with their own local facilities - their hatches. This approach will be replicated in the new communities and we will work to improve the offer and vibrancy of the existing hatches.

#### **ACCESSIBILITY AND INCLUSION**

Enabling choice will address social equality, improve digital connectivity, open up job opportunities and provide greater flexibility for people. Travel time will be reduced, encouraging investment in personal development activities and valuable time with family and friends.



ENABLING CHOICE ENABLING CHOICE

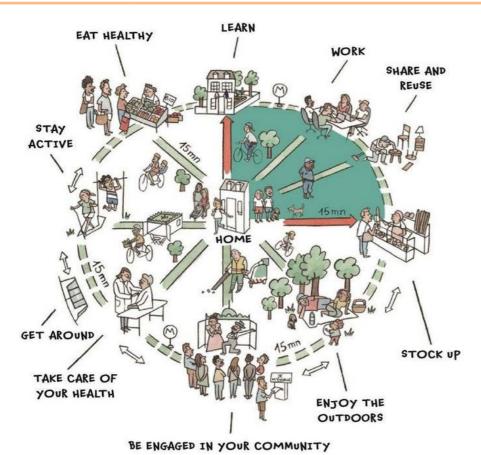
# What Enabling Choice Should Look Like In The Garden Town

# CURRENT CHALLENGES FUTURE OPPORTUNITIES Low number of people working from home (about 7%) Provide digital technology, such as "Better Digital" superfast Fibre broadband and 5G coverage, and local co-working spaces among other solutions as they develop, to improve improve the options for remote and flexible working. Proximity to services Vibrant town and neighbourhoods offering a wide range of local services and amenities such as shops, schools and healthcare which promotes shorter, more active, journeys.

Long Commutes

More opportunities to live and work within the Garden Town or local neighbourhoods to reduce travel distances.

Co-locate multi-modal transport interchanges and co-working spaces with local amenities and services and design them into new builds. Improve connectivity through effective street design, clear signage and innovative wayfinding.



Artistic example of the connections within a 15 minute neighbourhood. Source: 15 minute city by Prof. C. Moreno, Paris Sorbonne IAE, Illustration by Micaël

Poor connectivity

### MICAEL

#### **NEXT STEPS**

- Continue work to investigate how the Garden Town can evolve to harness key advancements within the digital sector.
- Futureproof new infrastructure to adapt to new technologies and advancements in digital enablement.
- Collaborate closely with internet and service providers to ensure the Garden Town is best placed to provide high speed internet connections to new and existing communities.
- Trial innovation on the Garden Town around shared and public transport platforms.
- Develop existing work on hubs, ensuring they provide for the needs of local communities and include co-working spaces and digital connectivity.
- Continue discussions with Developers to ensure all new communities are based on 15-minute neighbourhood principles to encourage local journeys.

#### **CASE STUDIES**



#### **Zedify Deliveries**

Zedify provides last mile delivery using a range of cargo bikes and electric vans in multiple UK cities



#### Leuven Hubs

The Belgian City of Leuven plans to introduce 50 mobility hubs over the next three years to improve multimodality in the city.



#### Melbourne 20 minute neighbourhoods

Melbourne has tested 20 minute neighbourhoods with great success and aims to roll them out across the city

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# **ACTION 2:**

# Streets for People

#### **OVERVIEW**

Creating Streets for People is about designing and making our streets and neighbourhoods places that are pleasant to travel in, safe, healthy, inclusive, accessible, community centred and enjoyable – for everyone. It's about ensuring existing and future residents of the Garden Town are healthier, happier and better connected.

HGGT will build upon, and enhance, Harlow's existing path network to ensure it's accessible, safe and attractive for all users. HGGT will support and actively encourage a culture of multi-modal mobility where people are inspired and motivated to travel actively and sustainably. Pedestrians and cyclists will be prioritised through seamlessly incorporating active and sustainable travel opportunities and infrastructure. If it is necessary to reallocate roadspace from parking or traffic to achieve this, it should be done.

#### **ACCESSIBILITY AND INCLUSION**

Streets for people put vulnerable users at their heart by designing infrastructure accessible, safe and inclusive for everyone including those on bikes, mobility scooters, adapted bikes, wheelchairs, walking or with a pushchair. Making it easy, safe and enjoyable to travel actively for all users, improves the health, fitness and quality of life of diverse resident groups so that they have the confidence to travel actively whatever their circumstance.



STREETS FOR PEOPLE STREETS FOR PEOPLE

# What Streets For People Should Look Like In The Garden Town

CURRENT CHALLENGES	FUTURE OPPORTUNITIES		
Harlow is currently car-centric	Encourage a transition to active and sustainable travel through infrastructure design and behaviour change programs.		
Cars dominate Harlow's streetscape	Create attractive local streets through measures such as walkable neighbourhoods, planting and parking controls.		
Excessive school time traffic	Implement behaviour change measures, School Streets, education programmes, training and street improvements.		
Travelling actively feels unsafe	Design new infrastructure to prioritise vulnerable users such as physically separating cyclists from pedestrians and motor traffic,improving lighting, upgrading crossings, and providing paths that are overlooked.		
Parts of the town are not well served by the network, including the more recent growth areas, neighbouring settlements, and villages.	A fine-grained network of walking and cycling routes that connect the new communities with the existing town.		
Existing infrastructure has missing links, outdated facilities, poorly maintained or missing infrastructure and severance.	Maintain, enhance and expand the active travel network and its associated infrastructure in line with best practice.		
Protect Green Spaces	Enhance and protect Harlow's green spaces, including green wedges and green fingers, and street planting, to support a wide variety of of functions such as sustainable movement and biodiversity corridors. Build in community stewardship of these assets.		
Homes and destinations lack suitable facilities	Provide secure cycle parking, shower and changing facilities, e-bike/ wheelchair/ mobility scooter charging, and storage at homes and destinations. Access must be at least as convenient, if not better, than for private motor vehicles.		

#### **NEXT STEPS/ACTION PLAN**

- Work with highways and local planning authorities on all highways schemes and active travel infrastructure enhancements to ensure consistency across the Garden Town and alignment with best practice.
- Develop a Parking Strategy and standards for the Garden Town which supports the Vision for healthy and sustainable growth, walkable neighbourhoods, reducing the reliance on the private car and high levels of sustainable and active travel.
- Develop a cycle hire scheme throughout the Garden Town and beyond, with intuitive and flexible payment systems and shared platforms, supported by education and training activities, to ensure bikes and parking are located to maximise opportunities for residents, workers and visitors. Find out more about how cycle hire schemes work here.
- Develop and deliver on the Local Cycling and Walking Infrastructure Plan (LCWIP) for HGGT which identifies gaps and opportunities in the existing pedestrian and cycle network to provide an enhanced, coherent and integrated network of high quality walking and cycling infrastructure which is accessible and attractive for users of all backgrounds, abilities and journey purposes.
- Utilise seamless wayfinding with a unified brand / typography to integrate with, and promote, the HGGT sustainable transport network and active and sustainable travel choices.
- Provide an ongoing, consistent educational and promotional behaviour change campaign to engage and develop partnerships with the community, educational bodies, workplaces and other key stakeholders, and to ensure widespread access to cycle training.
- Actively promote a culture where sustainable transport choices and active travel lifestyles are the norm.
- Develop a Workplace Travel Programme that includes information and initiatives to support and assist workplaces in encouraging a shift to active and sustainable travel.

#### **CASE STUDIES**



#### Levenshulme Bee Network

A flagship community led, active neighbourhood scheme for Manchester.



#### Waltham Forest

Delivering one of the 'Mini-Holland' schemes to make the borough more vibrant and enjoyable for everyone.



#### Groningen

The 'cycling capital' of the Netherlands where prioritising pedestrians and cyclists is key to 60% of trips being cycled.

# **ACTION 3:**

# **Quality Public Transport**

#### **OVERVIEW**

A quality public transport network helps individuals, communities and local economies to flourish. It helps to connect people and places, providing independence and mobility to those who need it most. When designed and managed effectively, local transport provision can reduce congestion, improve air quality and health outcomes, and help make Harlow's diverse communities greener, healthier and more attractive places to live, work, play, and attract inward investment from businesses and other organisations.

Proposals for public transport will need to create opportunities for services and user experiences which promote active and sustainable travel and surpass private vehicle travel. Existing villages and neighbourhoods should all benefit from the enhanced public transport services being delivered as part of the Garden Town's integrated travel network.

#### **ACCESSIBILITY AND INCLUSION**

Quality public transport provides the vital connections to those with limited or no alternatives, increasing access to services and opportunities. An effective public transport system will also encourage a shift away from private vehicle use, with the associated physical and mental health benefits.

#### **CURRENT CHALLENGES**

The quality, reliability and integration of timetabling for buses in Harlow has been criticised by residents.

Most services travel via the bus station in the Town Centre so bus journeys to the key employment and retail sites on the periphery of the town often require an intermediate change of buses.

There is a lack of integrated ticketing and routes to key locations.

Services to neighbouring settlements such as Epping and Bishop's Stortford are limited.

Fares are considered to be high, especially in comparison to driving.

The train stations are situated relatively far from communities in the south of the existing town and are not easily accessible by sustainable modes.



#### **FUTURE OPPORTUNITIES**

#### **Bus & Rapid Transit (BRT)**

BRT, is a fast, high quality, integrated bus service, that provides more direct, frequent and integrated public transport services between key locations within and beyond HGGT.

# Demand Responsive Travel (DRT) Digital Demand Responsive Transport (DDRT)

DRT and DDRT both look to provide transport in response to demand by users. DDRT creates a digital platform for joining up travel demand and supply. This would include journey planning and ticket purchasing.

#### **Enhanced Local Bus Services**

An Enhanced Quality Partnership (EQP) similar to that set up between Hertfordshire County Council and commercial bus operators would improve quality, connectivity, accessibility, integration with other travel options, optimal utilisation of advances in technology and better interchanges. This is a legally binding arrangement where improvements to services are agreed and implemented by both local authorities and bus operators. This would initially be funded through contributions in Section 106 planning obligations or other mechanisms for collecting infrastructure payments and Government funding with services ultimately becoming financially sustainable through increased passenger turnover due to the attractive nature of a high quality, fast and convenient service. A EHQ would positively benefit all bus services in the Garden Town including the new services that will operate on the Sustainable Transport Corridors.

The Government are requiring local authorities to adopt enhanced partnerships or a franchising model in new guidance. The Local Transport Authorities are currently working towards a Bus Service Improvement Plan which will look to implement the measures above.

#### **Public Transport Service Features**

- Directly linking key destinations such as the rail stations, town centre, hospital, educational sites and key employment areas.
- Public transport services provided from first occupation in the new Garden Communities (possibly demand responsive in early phases) so that new residents, workers or visitors develop sustainable travel habits from the outset. These services will connect with key destinations and neighbourhoods in the town, so will benefit existing residents, workers and visitors.
- Integrated ticketing with the wider transport network including flexible payment systems and shared digital platforms such as 'Mobility as a Service' (MaaS) (link) whilst ensuring that those without mobile internet access can also enjoy these benefits.
- Travel plans to mitigate the impact of construction traffic through provision of a bus service or similar alternative by developers to reduce single occupancy car use for construction workers on major development sites from key travel interchanges or temporary facilities.
- Up-to-date travel information accessed via online and offline platforms.
- DRT and DDRT, integrated with, and complementary to, the wider HGGT bus network and designed to meet the needs of more vulnerable travellers, rural residents and those unable to make use of other public transport provision.
- Optimising the use of existing and future legislation, regulations and technology to develop an aspirational enhanced local bus network across the Garden Town.
- High quality vehicles that are low emission, electric or hydrogen, have on-board Wi-Fi, charge points, etc.
- Encourage developers to design schemes and highways infrastructure to enable the above at masterplan and application stages.

#### **RAIL**

The West Anglia Main Line is a key transport link along the UK innovation corridor, connecting Harlow with cities such as London and Cambridge and Stansted Airport but also providing connections to the South-East and beyond. An Anglia Corridor Study (LINK: Anglia Corridor Study March, 2016) includes proposals for this line, which it identifies as a busy commuter and leisure route that has the potential for significant housing and employment growth. HGGT will support enhancements which include:

#### **Opportunities in Rail**

- Line speed improvements to support faster journeys.
- Enhancing Harlow Town and Harlow Mill stations to provide improved access and greater provision for - and connectivity to - sustainable modes.
- Support the development of northern access to Harlow Town station.
- Enable Harlow Mill and Harlow Town rail stations to operate as high-quality interchanges with bus services at station forecourts, including Real Time Information.
- Improving walking and cycling facilities and wayfinding to and at Harlow Town and Harlow Mill rail stations from residential areas and the town centre to encourage active travel access to rail services.
- Lobby for the benefits of four tracking and Crossrail 2 at Broxbourne.





#### **NEXT STEPS/ACTION PLAN**

- Develop a Quality Bus Partnership (QBP)
  to influence and improve service quality and
  infrastructure. Read more about how to improve
  bus services here.
- Develop existing work on hubs, ensuring designs provide seamless connection between modes and include suitable accompanying infrastructure and services to make public transport and active travel the first choice for journeys.
- Continue conversations with developers, public transport providers, network operators and other key stakeholders to ensure suitable services which promote active and sustainable transport are provided from first occupation of developments in the new Garden Town communities.
- Facilitate development of 'Mobility as a Service' journey planning and travel information mobility platforms to enable travellers to plan, book and pay for end to end journeys using real-time information for any mode.
- Develop a Wayfinding Strategy and a unified brand/typography for the network.
- Champion innovation and optimisation of technological solutions in public transport provision and encourage Garden Town partners, developers and other stakeholdes to do the same.
- Developing a platform through which to share data for future service enhancements.

#### **CASE STUDIES**



#### Notthingham's Bus Network

Award winning bus network uses electric, biogas, and Euro VI buses, multiple ticketing options and real time information.



#### West Sussex Fastway

Bypasses congestion hotspots via guided busways and dedicated bus lanes. 160% increased patronage and 19% decrease in traffic.



#### Belfast Transport Hub

A multi modal transport hub with bus stands, railway platforms, cycle and taxi provision designed to attract even more people to choose greener and active travel.

# ACTION 4:

# A Network that Works

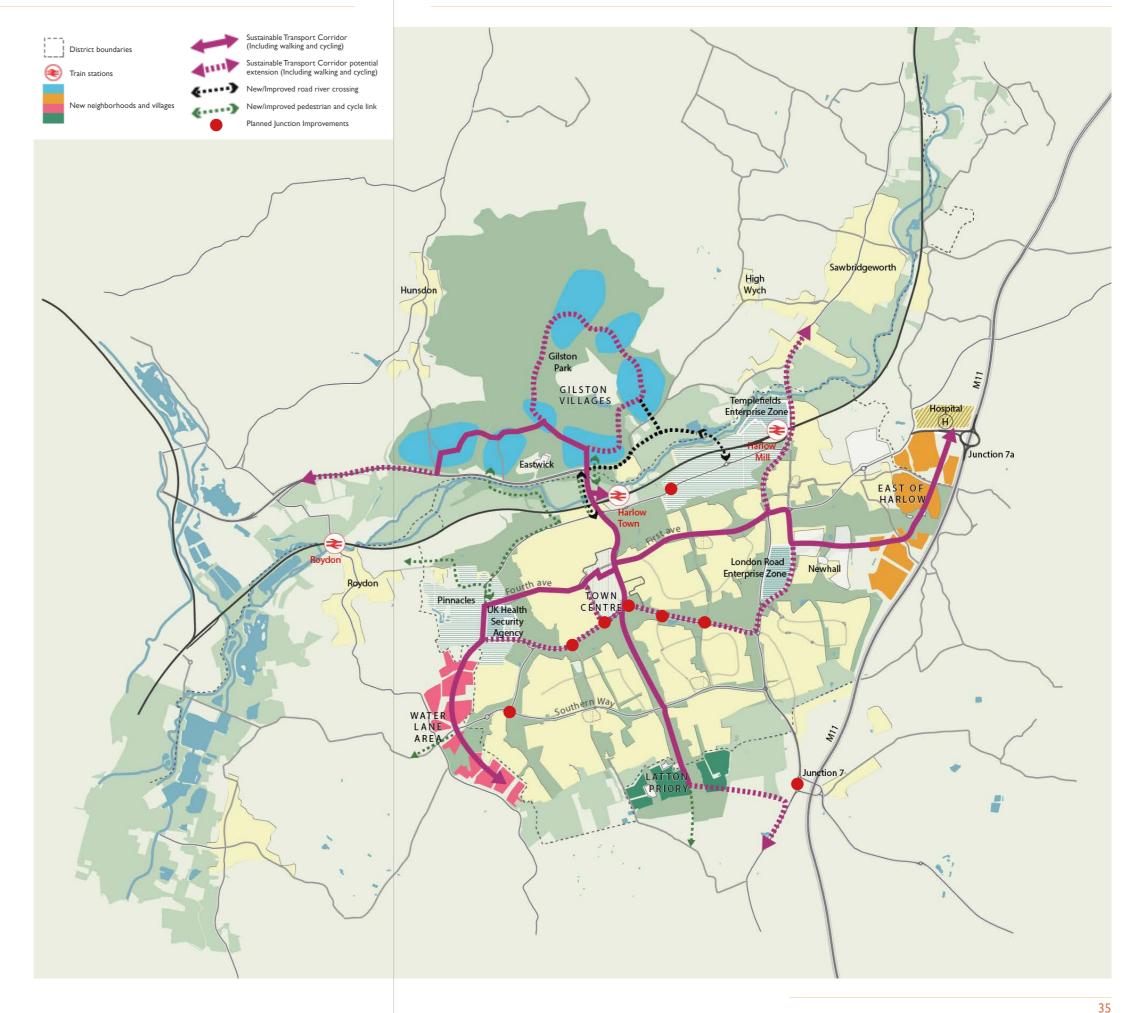
#### **OVERVIEW**

A Network that Works, for everyone, is a network that prioritises the most vulnerable, that reduces the reliance on private vehicles by providing credible, high-quality active and sustainable alternative options, that makes best use of the infrastructure we have and is resilient to change. By reducing the reliance on private vehicles this should allow for more reliable operation of the network for the movement of freight to support logistics, distribution, and service sector companies based in Harlow, which are a large part of the HGGT economy.

The HGGT Partner Councils recognise the value of existing transport infrastructure assets such as footways, cycleways, roads, lighting, traffic signals and signage. They also recognise the importance of prudent investment in infrastructure that will help to mitigate current congestion, improve air quality, and facilitate the planned growth across the Garden Town. However, it is acknowledged that extensive expansion in road capacity would conflict with the Vision for the Garden Town and the user hierarchy set out in Principle 1. This would reduce the ability to achieve, or the likelihood of achieving, the required Mode Share Objective.

#### **ACCESSIBILITY AND INCLUSION**

By delivering a network with the User Hierarchy at its core, vulnerable users will be considered first, supporting safer and more accessible streets, infrastructure and services. Putting people first instead of private vehicles will improve community cohesion, wellbeing and streetscapes while improving the efficiency of road-based travel for emergency services, public transport and necessary journeys.



A NETWORK THAT WORKS A NETWORK THAT WORKS

# What a Network that Works should look

# like in the Garden Town

#### **FUTURE OPPOORTUNITIES CURRENT CHALLENGES** High levels of car use causing air and noise pollution Enabling Choice to reduce unnecessary journeys and and congestion – particularly at peak times encouraging a shift toward sustainable and active travel Delivery of Sustainable Transport Corridors and other Bus services often delayed due to congestion highway infrastructure improvements should improve the efficiency and reliability of bus services Provision of a second Eastern Stort crossing and an The A414 presently provides the principal crossing over the River Stort and railway line but suffers from peak upgraded central Stort crossing with dedicated walking period congestion, constraining access to Harlow (and and cycling provision and frequent, fast bus priority to new Gilston area communities) and potentially stifling encourage modal shift Traffic and network management measures such as Residential roads used as rat runs revised speed limits and restrictions to specific routes to ensure motor vehicles remain on designated routes. Connections to the strategic highway network suffer A new motorway junction (Junction 7a – completed in from peak time congestion 2022/23) will provide greater connectivity to the new hospital site. Provision of second Stort crossing to enable connections to the Templefields Enterprise Zone and strategic network High levels of car use for short everyday journeys Education, training, apps and marketing activities to ensure residents are aware of non-car options available to them, and use the most efficient mode for each journey, particularly for short trips The walking, cycling and road network can be hard to Clear and high-quality signage, wayfinding and visibility navigate Some parts of the network are hazardous or not well Effective maintenance and management to maximise used due to disrepair longevity of infrastructure and user experience Some parts of the network feel unsafe for users Schemes or enhancements which particularly benefit vulnerable users through identifying pinch points, severance issues, or movement conflicts across the network. Developers should design schemes which include infrastructure or public realm features with

safety and inclusivity of vulnerable users as priority.

#### **Sustainable Transport Corridors**

HGGT provides a significant opportunity to use Harlow's distinctive spatial layout to facilitate sustainable mobility through the creation of Sustainable Transport Corridors (STCs). These are a series of strategic public travel routes through the Garden Town providing high quality public transport and active travel options that will connect neighbourhoods quickly with key destinations such as the town centre and Harlow Town railway station and primary business areas. The existing networks will feed into the STCs which will provide the standard for exemplary sustainable travel.

The capital funding of the STCs will be initially met through the Housing Infrastructure Grant and then sustained through the Rolling Infrastructure Fund, see Funding (p.48) for more details on these schemes. A stewardship agreement is being negotiated to ensure the infrastructure developed is maintained to a high standard. To see the timing of delivery please refer to the Transport Programme in Appendix X.

#### **STC** Features

- High-quality north-south and east-west sustainable movement routes between existing and new communities and key destinations across the Garden Town.
- · A network of walking and cycling routes, separated from motor traffic.
- Dedicated space for buses, to help them move freely, avoid congestion and have priority over other traffic.
- · Used by modern, high quality, low emission buses, that offer frequent, high quality, seamless, reliable, rapid services with limited stops.
- Fully integrated with other public transport options via high quality hubs providing a range of transport services and community facilities.
- Comfortable, safe, sheltered waiting areas which are provided with Real Time Passenger Information at key stops and interchanges.
- Future-proofed routes that can be adapted to ensure long term sustainability.
- Phased implementation will allow upgrading of services running on the existing roads along identified corridors and the improvement of connections between services.



A NETWORK THAT WORKS

A NETWORK THAT WORKS

#### **Parking**

The ready supply and low cost of parking in Harlow currently supports extensive use of the car. Addressing this will help to reduce private vehicle trips and support the Strategy's Mode Share Objective.

#### **CURRENT CHALLENGES**

# Widespread availability of affordable and privately controlled parking provision throughout the existing town encourages private vehicle trips as the easy choice.

High levels of residential on and off-street parking

Consistent parking on (or blocking) footways,

cycleways and green spaces.

Low Electric Vehicle uptake and provision of necessary infrastructure

#### **FUTURE OPPOORTUNITIES**

Improved access for active and sustainable travel to balance the needs of retailers and employers, whilst reducing the attractiveness of car use by making it harder to be certain of a parking space

Where required, residential car parking is to anticipate later conversion to other uses that benefits residents or the wider community.

Provision of car parking at homes should not be to the detriment of active and sustainable travel, it should be just as easy or easier for residents to walk to their local hatch, access a bike or a bus

The Government are exploring options to eliminate pavement parking

Charging infrastructure for electric vehicles in public and private locations to aid transition to low-carbon, zero-emission vehicle technologies.

#### **NEXT STEPS/ACTION PLAN**

- Conduct a town wide traffic management review and place-movement assessment to ensure efficient use of strategic transport infrastructure.
- Plans for the implementation of highway improvements will be developed between the relevant District and County Councils.
- Review options for a Park and Ride facility which links to a mass transit system.
- Continue work on plans to expand the existing Central Stort crossing and provide a new Eastern Stort crossing to improve connections.
- Consider the implications and feasibility of introducing demand management interventions, such as a workplace parking levy or congestion charge, as a revenue used to fund further active and sustainable transport investments.
- Review the supply and utilisation of existing commercial parking space in Harlow, most of which is privately owned.
- Engage with providers, developers and other stakeholders and, where possible, encourage them to consider converting space for conventional cars to electric vehicle charging spaces, autonomous vehicles, car club vehicles, cycle and powered two wheeler parking.
- Manage new parking supply at key destinations through the planning system.
- Work with businesses, retailers and developers to manage car park capacity to create a better balance between parking supply and land use.
- Work with businesses, retailers and developers to manage car park capacity to create a better balance between parking supply and land use.
- Explore the establishment of consolidation centres that can alleviate congestion within the Garden Town and provide last mile delivery services using freight bikes and electric vehicles.

#### **CASE STUDIES**



#### **DIY Streets**

Aims to improve the neighbourhood by reducing traffic speeds and rat running traffic through community co-design.



#### Forward Motion

Provides online travel information, advice, services, ideas, competitions and events for residents in South Essex.



#### Parking Places

In West Yorkshire, 88 rapid-charging points have been installed for taxis and the public, supporting a commitment to reduce harmful emissions.

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# **ACTION 5:**

# **Maximising** opportunities

#### **OVERVIEW**

The Garden Town offers extensive opportunities for innovation in mobility and transport, with its unique urban form and partnerships ready to enable delivery. Emerging technologies and shared mobility solutions have significant potential for helping to change travel behaviours. HGGT partners will lead on exploiting these opportunities as they arise.

The challenge lies in creating a seamless and attractive sustainable transportation network and associated services. Services should maximise infrastructure investments and benefits all members of the community. The Garden Town will have to be flexible and adaptable as technologies currently undeveloped or unknown are made available.

#### **ACCESSIBILITY AND INCLUSION**

New mobility technologies and services have the potential to widen the affordability, availability, and accessibility of transport. This would help narrow existing inequalities in transport provision and use. For example, real time information can improve the reliability and confidence around using public transport for older people and those with mobility-related needs.



MAXIMISING OPPORTUNITIES

MAXIMISING OPPORTUNITIES

# What Maximising Opportunities Should Look Like In The Garden Town

#### **CURRENT CONTEXT**

Wider links already exist in the Garden Town between the technology sector, councils, industry, research and education. By building on this partner collaboration, HGGT can act as the testbed for technological and socially innovative mobility solutions, to enhance the physical and social wellbeing of residents, workers and visitors. These opportunities include:

- The growth in the science, technology, engineering and digital industries at the Harlow Enterprise Zone;
- The arrival of Public Health England in the town and the re-provision of Princess Alexandra Hospital, helping to promote healthy living;
- The University of Hertfordshire Centre for Sustainable Communities and the presence of Harlow College and Anglia Ruskin University;
- Links with Transport Systems Catapult in Milton Keynes.

#### **FUTURE OPPORTUNITIES**

New and developing energy innovations such as electric and hydrogen vehicles.

Freight and cargo bikes for last mile delivery.

Shared mobility services reducing the need and expense for personal vehicle ownership.

Mobility as a Service (MaaS) and advanced Rapid Transit options (bus or rail) potentially delivering a significant shift from car ownership and make it easier to travel.

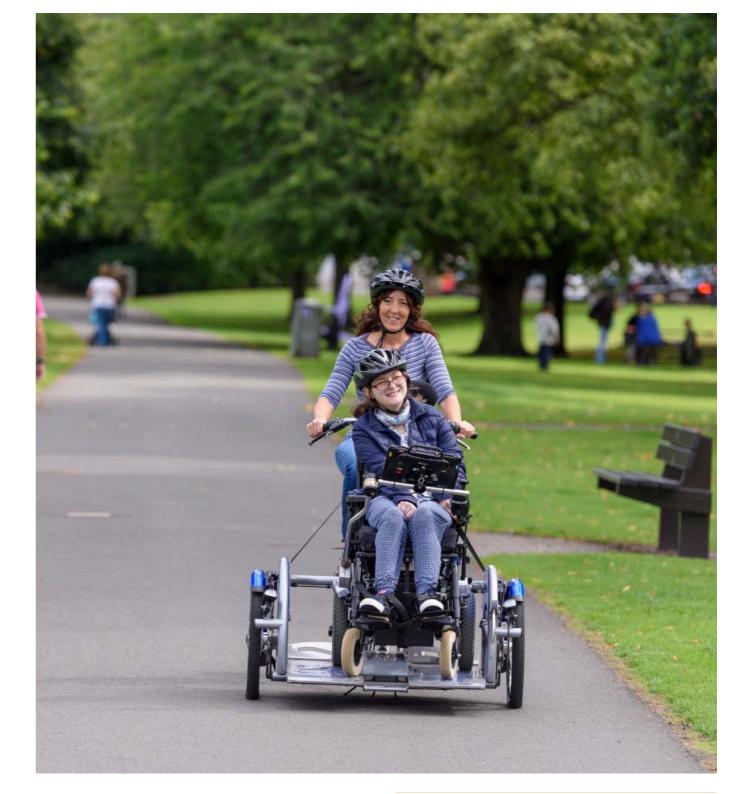
Innovative technology platforms can be used to match the supply and demand for transport in rural areas.

Staff training and technological improvements in public transport to make it safer, quicker and easier for those with disabilities and accessibility requirements.

Enhanced transport data gathering and artificial intelligence to maximize network efficiencies.

Trials of autonomous and connected vehicles.

Drones can be used to address local needs, from supporting emergency services to improving the safety of infrastructure inspections.



MAXIMISING OPPORTUNITIES MAXIMISING OPPORTUNITIES

#### **ZERO EMISSION VEHICLES**

In 2020, the government brought forward the end to the sale of new petrol, diesel and hybrid cars and vans from 2040 to 2030. Therefore, over coming years the market share of zero emission vehicles (ZEVs) will increase substantially.

#### **Benefits of ZEVs:**

ZEVs have a number of <u>benefits</u> over conventional fossil fuel vehicles:

- Zero tailpipe emissions and substantially lower greenhouse gas emissions than conventional vehicles, even when taking into account the electricity source.
- Improved local air quality by reducing harmful emissions such as nitrous oxide and carbon dioxide.
- Significantly quieter than vehicles powered by conventional engines.
- Cheaper to run than fossil fuel vehicles for consumers as fuel is cheaper, no congestion charges, reduced/no vehicle tax and Government grants.

Given the current context around infrastructure, transport, society and policy, it is clear that ZEVs will play an important part in the drive to decarbonise transport and are a key transitional tool for supporting the mode share targets outlined in this Strategy.

#### **Charging Infrastructure**

Harlow only has eight public charging points – one rapid and seven fast. The uptake of electric vehicles in Harlow is estimated to be 60% by 2033. As such, charging points for BEVs will need to be rolled out rapidly and should comprise a mix of private chargers at homes and workplaces and public on-street charge points, for top-up charging and on the strategic road network for longer distance inter-urban charging. Any standard parking provision developed should be future proofed to ensure provision for later installation of charging with minimal retrofitting cost/ disturbance.

Developers and contractors will be expected to align with guidance from updated parking standards which will include standards for all residential dwellings with parking provision to include a charging unit. There will also be guidance around commercial and public parking.

The Government have committed £500m for EV charging infrastructure to meet future charging demands and funding can also be secured from other areas such as through developer negotiations and regional funding mechanisms.

#### The Role of ZEV's

ZEVs are a powerful tool in the transition to a sustainable transport network and there is a clear need for additional infrastructure to support uptake. They are part of the solution for our future travel needs alongside prioritising active travel and public transport (as per the User Hierarchy).

#### **Future Opportunities**

Shared mobility services such as <u>car clubs</u> which reduce the need and expense of personal vehicle ownership.

#### **NEXT STEPS/ACTION PLAN**

- Support Masterplans which demonstrate flexibility in anticipation of future mobility scenarios, including adaptable parking (for future conversion to other uses), drop off and pick up arrangements and electric vehicle charging points to ensure that communities can readily respond.
- Secure funding and work collaboratively with the partner councils to increase the number of public charge points for electric vehicles.
- Exploit opportunities to trial and develop shared mobility, demand responsive, autonomous and alternatively fuelled vehicle and public rapid transit technologies with partners. HGGT will also be seen as being open to innovation through marketing and lobbying of businesses, institutions and government.
- Facilitate development of 'Mobility as a Service' journey planning and travel information mobility platforms to enable travellers to plan, book and pay for end to end journeys using real-time information for any mode.
- Consider the benefits of adopting an 'open data' approach for transport data to support innovation and investment in data solutions and other technologies which aid mobility, traffic and parking management, enabling real-time advice to users.
- Encourage sustainable deliveries: including low carbon vehicle use, delivery hubs and last mile logistics which use electric vehicles, freight bicycles (typically electric aided), or cargo bicycles to deliver goods to local centres or the final destination.
- Give consideration to shared public transport vehicles being able to use bus priority.

#### **CASE STUDIES**



#### Vivacity Labs

Al sensors and 'Smart Junctions' signal controls gather detailed travel data, to help build a case for strategic transport decisions.



#### Zipabout

Personalised routing using image recognition avoids stressful environments such as crowded locations or unstaffed stations.



#### Red Ninja

'LiFE', an intelligent mobility algorithm, uses AI to manipulate traffic along an emergency service vehicle's route in real time, reducing journey times by up to 40%.

### **NEXT STEPS**

By adopting this strategy, the Councils are committing to a unified approach to deliver HGGT as set out in their respective Local Plans and Spatial Vision for the area.

#### **Transport Strategy next steps include:**

- Securing developer funding without which the strategy cannot be delivered;
- Developing a detailed, funded programme for delivery of the actions in this strategy;
- Continue to develop and update the Infrastructure Delivery Plan for the Garden Town which prioritises, phases and identifies funding opportunities for sustainable transport schemes;
- Development of monitoring and evaluation strategy, including a set of targets, which we will use to monitor our progress toward meeting our sustainable mode ambition;
- Working with partner authorities to ensure the new Garden Town communities have high quality links with key employment centres.

#### **Working with Developers**

The Garden Town will collaborate closely with developers, who are crucial to achieving the sustainable mode share targets within this Strategy. HGGT have the following expectations of developers:

- New development should incorporate the movement hierarchy as a first principle.
   Development should seamlessly incorporate sustainable travel opportunities and infrastructure.
- Applications for new developments or changes to existing developments will be expected to consider its interaction with the wider transport context and may be required to participate in, and contribute to, wider collaborative proposals to facilitate overall sustainable travel delivery.
- Travel Plans will be required for all development within the HGGT set against the HGGT Travel Plan which will form the basis of expectations for the site, in accordance with the requirements of the National Planning Policy Framework (NPPF), County or District Policies or HGGT guidance.

#### Masterplans and planning proposals should:

- Reflect the Mode Share Objective, Principles and Actions of the Transport Strategy and will be expected to demonstrate how they have incorporated Active Design into proposals which promote physical activity and active lifestyles through the built and natural environment;
- Demonstrate a high level of sustainable mode share and flexibility in anticipation of future mobility scenarios;
- 3. Ensure properties and co-working spaces enable residents to work from/near home where possible.

# Mechanisms to achieve the Mode Share Objective

Developer negotiations: This includes section 106 and or other legal processes through the Highways Act such as section 38 or section 278, where a third party designs and submits a detailed scheme for technical approval by the Highway authority and then delivers a scheme in accordance with the approved design. The exact powers used may vary depending up on the location and design of the proposal. The Garden Town will negotiate with developers to ensure that adequate funding contributions are made from developers to achieve the ambitions of this Strategy.

#### Local development policy

Local Plans, Local Transport Plans and other adopted transport policy carries planning weight and policies must be conformed to during the planning and design of new developments.

The HGGT Transport Strategy: This Strategy has been approved by the HGGT Board and endorsed by the three District Councils as a material planning consideration. This gives the Strategy weight when making planning decisions.

Monitoring: A monitoring framework will be established to ensure alignment with this Strategy. This Framework will be based on the recommendations from the HGGT Monitoring Framework Technical Note. Policies and schemes will also be monitored internally through the HGGT Board approval and oversight process.

#### **Funding**

#### **Developer Contributions**

Developer contributions is a collective term mainly used to refer to the Community Infrastructure Levy (CIL) and Planning Obligations (commonly referred to as 'Section 106' or '\$106' obligations/agreements) or any successor policy, levy or tariff that may be put in place to ensure development proposals contribute to infrastructure needs and effectively mitigate their impacts. These are planning tools that can be used to secure financial and non-financial contributions (including affordable housing), or other works in kind, to provide infrastructure to support development and mitigate the impacts of development.

### The Housing Investment Grant (HIG) and Rolling Infrastructure Fund (RIF)

The Garden Town has secured £171 million from Homes England through the Housing Investment Grant Fund to forward fund the provision of transport infrastructure. Whilst this infrastructure is primarily focussed on unlocking delivery of the Gilston Area new garden community development, parts of the infrastructure also support broader growth and regeneration across the Garden Town. The availability of HIG funding will permit the "forward funding" of infrastructure, this will enable developers within the Gilston Area allocation to deliver other additional items of infrastructure required to support development in earlier phases. Delivery of HIG funded infrastructure will unlock planned growth and delivery of homes in the Garden Town, which will generate further financial contributions from developers that can then be used to fund other infrastructure priorities as identified within the Garden Town IDP and/or required by policy. These developer contributions will be managed in a fund called the Rolling Infrastructure Fund (RIF).

# The South East (SELEP) and Hertfordshire (Herts LEP) Local Enterprise Partnerships

LEPs work in partnership with central government and its key agencies to pursue and attract major investment into the South East and Hertfordshire to deliver significant economic growth. LEPs identify and support local strategic growth priorities, encourages

business investment and promotes economic development.

In total the SELEP Growth Deal with Government has brought nearly £600m of investment to the region with the aim to deliver 78k jobs and 29k homes. Hertfordshire LEP has secured £204m to deliver 11k jobs and 16.5k new homes.

#### **Transport East**

Transport East is the Sub-national Transport Body for Norfolk, Suffolk, Essex, Southend-on-Sea and Thurrock. The partnership provides a single voice for our councils, business leaders and partners on our region's transport strategy and strategic transport investment priorities, working in close collaboration with the government and the rest of the UK.

Transport East will develop a Transport Strategy and Delivery Plan for the region which ensures that transport fully supports its members shared ambitions for economic growth, quality of life and prosperity.

#### Department for Transport (DfT)

The DfT allocates a large amount of funding through various schemes such as the Local Sustainable Transport Fund, Sustainable Travel Towns Scheme and the Access Fund among many others. The Garden Town will look to secure government funding through these schemes where and when appropriate and available.

# Harlow Local Highway Panel (Harlow LHP) proposals

LHPs are responsible for making recommendations and setting priorities for Highways schemes in their areas. Panels are made up of a representative number of Members from the County and the District. The Panels prioritise local concerns and small scale measures and make recommendations to the Cabinet Member for the implementation of highway schemes that meet the concerns of local people.



# **Glossary**

We recognise that some of the definitions of new mobility services are contested. Within this document we use the following definitions.

#### **Active travel**

Active modes are considered to be walking and cycling, but also include micro-mobility options.

#### **Bus Rapid Transit**

Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast, direct, and cost-effective services at metro-level capacities.

#### Car clubs/car-sharing

Car clubs use electronic systems to provide customers unattended access to cars for short-term rental, often by the hour. Business models can be categorised into round-trips, where the vehicle must be returned to its home station, and flexible, which allows one-way trips. Vehicles may be owned by individuals and lent out on a peer-to-peer basis via an intermediary platform, or form part of a fleet owned by a single organisation.

#### **Commuter and utility walking and cycle routes**

Routes that support necessary everyday travel, are located and designed to be direct and convenient in terms of journey time and distance, and are of sufficient capacity, segregated, surfaced and lit to enable safe use at all times by all users.

#### **Demand responsive transport**

A flexible service that provides shared transport in response to requests from users specifying desired locations and times of pickup and delivery. Dialaride services scheduled through next day or advance bookings are a traditional example.

#### **Developers**

An organisation whose job involves buying and selling buildings/land and arranging for new buildings to be built.

#### **Development site**

A parcel of land where land disturbing activities have been or will be initiated to complete a land development project.

#### **Dynamic demand responsive transport**

More recent applications of demand responsive transport seek to work dynamically, adjusting routes in real time to accommodate new pickup requests often made minutes in advance.

#### **Electric vehicle**

Electric vehicles (EVs) are defined as vehicles that can take on power from an external source and comprise Battery Electric Vehicles (BEVs) and plug-in Hybrid Electric Vehicles (PHEVs).

#### Four tracking

A quadruple-track railway (also known as a four-track railway) is a railway line consisting of four parallel tracks with two tracks used in each direction. Quadruple-track railways can handle large amounts of traffic, and so are used on very busy routes.

#### Hub

A facility that provides a convenient interchange between a range of mobility types (public transport, bikes, scooters etc.) for all users and which is colocated with other community facilities such as cafes, shops, parcel drops etc.

#### Leisure walking and cycle route

Routes that support cycling for health and pleasure purposes, are located and designed to provide a safe and attractive environment where the route itself may be one of the main attractors (as opposed to directness), can be shared with pedestrians and can accommodate places to stop and rest.

#### **Micro-mobility**

The use of small mobility devices, designed to carry one or two people, for short trips or 'last mile' deliveries. Rollerblades, tricycles and scooters, as well as wheelchairs and other adapted cycles are examples.

#### Mobility as a Service (MaaS)

The integration of various modes of transport along with information and payment functions into a single mobility service. Recent services that allow customers to purchase monthly subscription packages giving them access to public transport and private taxi and bike hire schemes are an example.

#### **Modal shift**

A modal shift means a change from one mode of transportation for a journey to another. For example, switching from driving a car to walking.

#### Mode

A transport mode refers to the way in which passengers and/or goods can be transported. For example, train, bus or walking.

#### Mode share

Mode share (also called mode split) is the percentage of travellers using a particular mode of transportation or number of trips using said type.

#### Particulate matter (PM)

Small airborne particles. PM may include materials such as soot, wind-blown dust or secondary components which are formed within the atmosphere as a result of chemical reactions. Some PM is natural and some is man-made. PM can be harmful to human health when inhaled, with the World Health Organization classifying it as carcinogenic to humans. In general, the smaller the particle the deeper it can be inhaled into the lungs, and the greater the risk that it is transferred to the bloodstream or body tissues. PM10 is particulate matter 10 micrometres or less in diameter, PM2.5 is particulate matter 2.5 micrometres or less in diameter. By way of comparison, a human hair is about 100 micrometres in width.

#### Planning application/pre-application

A planning application is a formal request to a local authority for permission to build something new (i.e. shops, homes, schools etc.) or to add something to an existing building.

#### **Ride-hailing**

Ride-hailing services use smartphone apps to connect paying passengers with licensed taxi drivers or private hire vehicle operators who provide rides for profit.

# Ride-sharing (sometimes known as carpooling)

Formal or informal sharing of rides between unlicensed drivers and passengers with a common or similar journey route. Ride-sharing platforms charge a fee for bringing together drivers and passengers. Drivers share trip costs with passengers rather than making a profit.

#### **School Street**

A School Street is a road outside a school with a temporary restriction on motorised traffic at school drop-off and pick-up times. The restriction applies to school traffic and through traffic.

#### **Shared mobility**

Transport services that are shared among users, either at the same time or one after another. Public transport, or mass transit, as well as newer models such as car-sharing, bike-sharing and ride-sharing, are all types of shared mobility.

#### **Sustainable travel**

Sustainable modes are considered to be any local bus/tram-based rapid transit and demand-responsive bus services. Active travel modes are also deemed sustainable.

#### **Transport network**

A transport network denotes either a permanent track (e.g. roads, rail, and canals) or a scheduled service (e.g. airline, public transit, train). It can be extended to cover various types of links between points along which mobility can take place.

#### **Vulnerable user**

Non-motorised road users, such as pedestrians and cyclists as well as motor-cyclists and persons with disabilities or reduced mobility.

#### Zero emission vehicle

A zero-emissions vehicle (ZEV) is a vehicle that never emits exhaust gas from the onboard source of power.