Transforming Travel in Watford: The Strategy for 2021 - 2041

Supporting Document



Our strategy to make it easier and greener for people to get around, particularly by walking, cycling and using public transport.



31 January 2022

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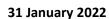
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Why changing the way we travel benefits us all

Everyone benefits when there is a greater choice of greener ways to travel, and we know that just by making a few changes to some of our journeys in and around Watford, we can all have a big impact. This Sustainable Transport Strategy set outs how, by making it easier for people to make green travel choices, we can cut congestion, enjoy cleaner air, reduce our carbon footprint and feel healthier.

In the strategy, you will see how Watford Borough Council and Hertfordshire County Council have been working together to find practical ways to make a real difference to travel in the town. Both councils declared a Climate Emergency in 2019, setting a goal of being carbon neutral organisations by 2030 and looking at ways to support both the town and the county transition to carbon neutrality. Developing this new strategy is one way to help achieve this goal.

Our new shared vision for travel in Watford shows how we propose to offer more ways to get around the town that are kinder to our local environment and often quicker and more straight forward, looking at better walking and cycling routes as well as more accessible public transport. We can all play our part in making our town less congested, healthier and cleaner and we recognise the importance of involving our residents, businesses and community in shaping these positive changes.

We consulted on a draft strategy in autumn 2021, finding significant support for implementing changes to how we travel. The strategy has now been finalised, including our priority objectives for action, based upon this feedback. We will continue to engage with residents and businesses to now design and implement the solutions.

In delivering the strategy we also commit to:

- Ensuring equality of opportunity in all our schemes
- Collaborating with our neighbours
- Leading by example in making both councils' travel more sustainable

Thank you for taking the time to read our strategy, which we hope will inspire us all to see how we can make greener travel choices. You can find more information at: http://www.watford.gov.uk/futuretravel

Elected Mayor Peter Taylor

Watford Borough Council

Councillor Phil Bibby

Executive Member for Highways & Transport Hertfordshire County Council



Introduction

This document details the transport strategy for Watford for the period 2021 - 2041. A summary of this strategy, *Transforming Travel in Watford*: the strategy for 2021 - 2041 is also available at: http://www.watford.gov.uk/futuretravel. The reasons for developing a transport strategy are set out within, as well as the current transport characteristics, issues and opportunities in Watford. Based upon this context, a set of objectives has been developed, and proposed 'actions' that Watford Borough Council and Hertfordshire County Council will pursue to meet the objectives. Some actions are short term (over the next five years), and others longer term, to be implemented over the full twenty year course of the strategy (or beyond). It is not expected that the strategy will lead to an overnight transformation, but act as a basis for a programme to deliver change. The document concludes with consideration of how the actions will be funded, and how progress will be monitored.

Why must Travel in Watford be Transformed?

Importance of Transport

The role of transport is fundamental to many aspects of life. How people and goods move has significant impacts on climate change and air pollution. Transport plays a critical role in people's everyday lives; affecting their health, wellbeing, opportunities, and quality of life, whilst the economic viability of many businesses is dependent on a functioning transport network. It is therefore fundamental that Watford has a strategy on how best to manage and plan for the future of transport in the borough.

Climate Emergency

Watford declared a Climate Emergency in 2019, with a goal of being carbon neutral by 2030. As a sector, transport emits more greenhouse gases than any other in the UK, of which emissions from road transport are the most significant contributor³. Emissions have stayed stable over the past decade when those from most other sectors have declined. To meet the goal of net neutrality by 2030, transport in Watford will need to change significantly, with a switch away from the current situation where the majority of trips are in petrol or diesel-driven cars, vans and lorries. This will necessitate far more journeys being completed in greener ways, primarily walking, cycling and using public transport.

It would take over 100,000 acres of forest to absorb the current CO_2 emissions from transport in Watford 1,2

Functioning Town

The highway network of Watford already suffers from significant congestion, with average speeds below 10mph on many roads in the morning peak. This makes journeys longer, less pleasant and more unreliable; affecting people's quality of life and business productivity. With both the population and number of jobs in Watford expected to rise over the next 15 years, traffic modelling forecasts that, without changing how people travel around the borough, the highway network will be unable to cope and is already at capacity in places. In a heavily built-up environment such as Watford there is not the space to expand the capacity of the highway network, and evidence suggests that such an approach is likely to ultimately encourage more vehicles to travel in the area. To maintain an efficient transport network in Watford, trips need to be switched away from private motor vehicles to other modes.

Survey Result: Over 65% of respondents thought travelling in Watford was difficult during peak periods



Quality of Life

The reliance on private motor vehicles for trips in Watford, and the resulting dominance of motor traffic on many streets, significantly detracts from the quality of life of many residents. Time spent in congestion is, for the vast majority, neither productive nor enjoyable and costs drivers money. Roads that are full of vehicles are noisy, suffer from air pollution, and are not spaces where people like to spend their time. As demonstrated by the COVID-19 lockdowns, when traffic is reduced, streets are much more pleasant, encouraging more cycling and walking, interactions between neighbours, and the use of local amenities and local businesses. An efficient transport network with less reliance on private vehicles will provide both residents and businesses more opportunities, as journey times are reduced and more places both in and outside the borough become easily accessible.

On average, Watford residents spend 58 minutes a day commuting by car⁴

The accessibility of the transport network is a key factor in improving opportunities for people with a disability to move around the borough, enhancing this accessibility will significantly improve the quality of life for many people.

Watford has multiple wards in the top 30% most deprived in the UK. Availability and cost of transport can play a big role in people's access to employment, education and other key amenities. Improving the transport network will make it easier for residents to get around, and cheaper, reducing deprivation and creating a more equitable borough.

Health and Wellbeing

Changing the transport network in Watford offers the chance to gain significant health benefits for those in the borough. A lack of physical activity is a major problem in Watford and across the UK. Walking and cycling offer an opportunity to incorporate exercise into people's everyday journeys. A transport network where active travel is the default choice for short journeys will have large benefits for the wellbeing of Watford's residents, reducing pressure on the healthcare system. More sustainable transport will lead to cleaner air and reduce illness and deaths caused by pollution. Improving the transport network will also offer an opportunity to make it safer, reducing the number of people killed or seriously injured by motor traffic, of which there have been over 140 in the past five years on the streets of Watford.

1 in 3 Watford residents do less than the recommended amount of physical activity⁵

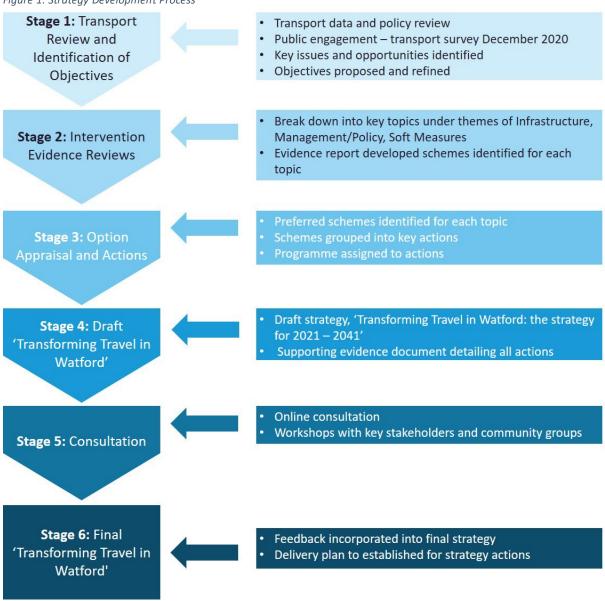




How has the Strategy been Developed?

This strategy has been jointly developed by Watford Borough Council and Hertfordshire County Council, with work undertaken including analysis of transport provision and movement patterns, modelling and benchmarking against other locations, plus an initial engagement exercise in December 2020, referred to as the Watford Travel Survey. A draft strategy was published for consultation in late summer 2021, with feedback incorporated into this final version. The consultation showed strong support for *Transforming Travel in Watford*, with over 80% of respondents agreeing that Watford needs to make changes to its transport network to help tackle climate change, and nearly all proposed actions receiving at least 50% agreement. Full details on the consultation results can be found at Appendix A. The process by which the strategy was developed is set out in Figure 1.

Figure 1: Strategy Development Process





What is the Situation in Watford Today?

The strategy must respond to the existing travel situation in Watford and align with related policy. The policy and transport context is summarised in this section.

Policy Context

National, regional and local policy all set out a need for transport to become more sustainable and less reliant on petrol and diesel private motor vehicles. The government's *Decarbonising Transport Plan* makes clear that, "we must make public transport, cycling and walking the natural choice for all who can take it," and includes commitments to increase cycling and walking; decarbonise rail and bus networks; as well as all vehicles on the road becoming zero emission⁶. A wide range of other national policies and plans covering both transport and planning policy all similarly endorse a switch to more sustainable transport.

Hertfordshire County Council's *Local Transport Plan* includes the key principle of encouraging active travel and a mode shift away from the private car. To aid this shift, a Transport User Hierarchy has been developed, setting out a requirement to consider the needs of vulnerable road users (pedestrians and cyclists) then passenger-transport users, above those of motor-vehicle users in planning for transport.⁷

Figure 2: Hertfordshire Local Plan Transport User Hierarchy



The Local Transport Plan is supported by a Growth and Transport Plan for South-West Hertfordshire. This is a strategic spatial transport plan that identifies the transport interventions required to address current conditions and support sustainable development in this area of the county, including Watford, and has been referenced in the development of this strategy⁸. Additional specific strategies relating to key transport modes have been developed by Hertfordshire County Council and integrated as appropriate, for example, the Hertfordshire County Council Rail Strategy.

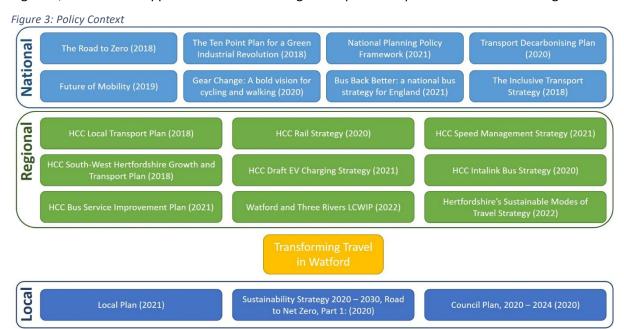
To accompany the declaration of the Climate Emergency, Watford developed the *Sustainability Strategy Part 1 – 2020 to 2023*, which covers the approach to reaching carbon neutrality by 2030, whereby the borough will have net zero emissions of carbon dioxide, building upon the existing sustainable transport schemes implemented by the council. The *Watford Borough Council Plan 2020–24* commits to building new, greener ways to travel in and around Watford and promoting a transition to a low-carbon economy⁹. The *Final Draft Local Plan* (2021) sets an ambition for Watford to become a Sustainable Travel Town, which will mean "an urban environment where people choose to walk and



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cycle, whilst reducing the impact of cars on the transport network, and promoting the use of public transport" ¹⁰.

There is clear policy support for making transport greener, by reducing car trips and enabling travel by active and sustainable modes to respond to the Climate Change Emergency in Watford. Developing a sustainable transport strategy responds to this, and aligns not just to Watford Borough Council's policy, but that of national government and Hertfordshire County Council. The key national, Hertfordshire County Council and Watford Borough Council policy documents are summarised in Figure 3, all of which support the aim of reducing the impact transport has on climate change.



The Characteristics of Watford

Geography and Socio-Demographics

The borough of Watford covers a relatively small geographical area, being less than five miles from north to south and less than three from east to west at most. With a population of just under 100,000 people, population density is high, reflecting its primarily urban nature¹¹.

Watford is within the top 40 most densely populated Local Authorities in the UK

Watford is ranked 195^{th} out of 317 Local Authorities in England in the government's Indices of Multiple Deprivation (where 1^{st} is the most deprived), with wards in the 20% most deprived, as well as the 10% least deprived. Both the proportion of adults classified as obese or overweight, and the proportion of physically active adults are worse than the national averages 12.

Transport Network

Watford benefits from good national and regional transport connections, given its proximity to two motorways, the M1 and M25, and a combination of rail links, including the West Coast Mainline, London Overground, Metropolitan Underground Line and Abbey Line. Bus connections provide links to other towns in Hertfordshire and Bedfordshire, as well as North London. Key transport links are summarised in Figure 4.

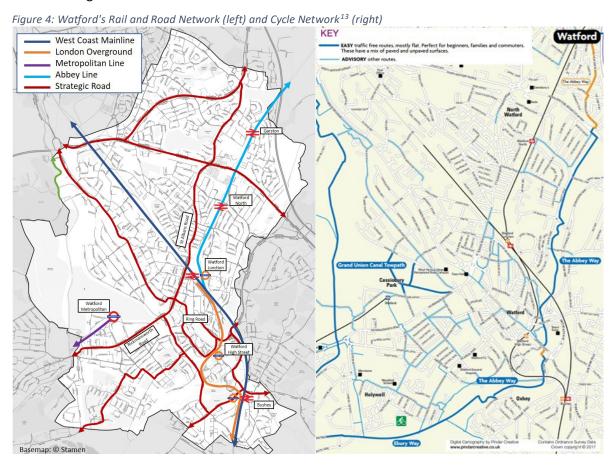


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At a local level, the transport network includes strategic 'A' roads extending from the town centre in most directions, with the centre itself being almost entirely surrounded by a ring road. In many places these roads are wide, with multiple lanes for general traffic.

Sustainable transport provision is less comprehensive. The cycle network is fragmented, as shown in Figure 4 there are sections of quiet off-road route along the Ebury Way, Grand Union Canal and Colne Valley. These contrast with a general absence of high-quality cycle infrastructure in the urban areas where people need to travel to key destinations, with most routes being 'advisory', suggesting they may not be appropriate for all users. People cycling must often mix with high volumes of or fast moving traffic, or share space with people walking. Provision for walking is mixed, with some high-quality urban realm with plenty of space, such as sections of the High Street, St Albans Road and the recently upgraded Clarendon Road. In contrast, in many areas, footways are narrow, opportunities for safe road crossing are limited, and the wide, high-capacity roads cause severance and create uninviting environments for people to walk. Many of the streets in the town are not easily accessible for people with disabilities.

The bus network is focused on the town centre, Watford Junction and the key arteries of St Albans Road, Rickmansworth Road, and Lower High Street. Service frequencies are mixed and bus priority measures are limited. The multiple rail stations primarily serve trips in and out of Watford, although some local trips can be completed along the Abbey Line, or between Watford Junction and Watford High Street or Bushey Station. Only Watford Junction and Watford North Stations have step-free access throughout.





Travel in Watford

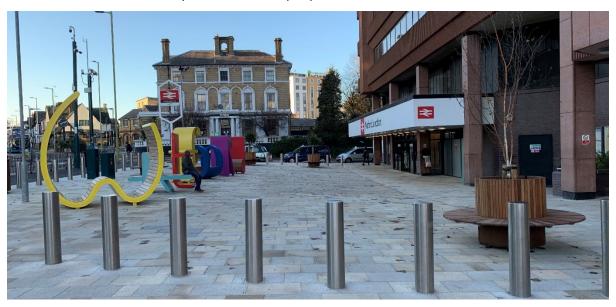
For all trips made by Watford residents, the main mode of travel of each journey, as recorded by Hertfordshire's County Travel Survey in 2018, is summarised in the figure overleaf. The majority of trips are made in private cars. Walking is the next most-frequent mode, and cycling and buses make up very small proportions, both being less than 5%. Journeys made by Watford residents are mostly short, with 19% being less than a mile, and 54% being less than three miles¹⁴.

Other Bus 40% 4% 1% 35% 30% Proportion of Trips 25% Walk 28% 20% Car as 15% Driver 41% 10% Tube 1% 5% 0% Train ess than 1 mile 1-3 miles 3-5 miles 5-10 miles 10-15 miles 15-20 miles 20+ miles 6% Car as **Passenger** Cycle 17% 2%

Figure 5: Trips by Main Mode (left), and Distribution of Trip Lengths (right), Watford Residents, 2018¹⁵

Watford experiences both high inbound and outbound commuting, with around 55% of people working in Watford commuting in from outside the borough (28,800), but nearly as many commuting out each day (24,900)¹⁶, prior to the impact of the COVID-19 pandemic.

Around 80% of households in Watford have a car¹⁷, although lower than other areas in Hertfordshire, it is above the national average of 74%. With just under 0.7 cars per capita, the borough is in the top 30% authorities in the country in terms of cars per person.



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The number of cars registered in Watford rose from 2010 to a peak in 2017, since when it has stayed stable, shown in Figure 6. In the same period the total distance driven by all vehicles on Watford's roads has stayed relatively stable ¹⁸. Car ownership is unequally distributed in the borough, with rates particularly high in Cassiobury, as illustrated by Figure 6. However rates are much lower around the town centre, demonstrating both the reduced need for a car where public transport provision is higher, and that with nearly 50% of households in this area not owning a car, the need to provide for those who don't have access to one.

70,000
60,000
40,000
20,000
10,000

Figure 6: Total Registered Vehicles in Watford by Year¹⁹ (left) and Levels of Car Ownership by Area²⁰ (right)

Current Sustainable Transport Schemes

As part of Watford Borough Council's Sustainability Strategy, a range of schemes exists within the borough to promote sustainable travel, as follows:

- **Electric-car club** cars based at the Town Hall that can be borrowed by both council staff and residents.
- **High Street improvements** making a more friendly environment for people walking that provides for public transport and taxis, with private vehicle traffic access restricted.
- Clarendon Road improvements upgrades to carriageway and footway to create more attractive route between town centre and Watford Junction.
- **Electric vehicle charging infrastructure** installed in council car parks and on streets around the borough.
- **Bike share scheme** 200 pedal bikes and 100 e-bikes at over 70 locations across the borough that can be used by residents and visitors.
- **On-demand bus service** flexible bus service that responds to passenger demand and follows the routes they wish to take.



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• **Travel app**: free smartphone app for journey planning in Watford, allowing people to choose the best options for a given journey, based on cost, waiting time and environmental impact.

These schemes have made more sustainable travel possible, with more than 180,000 journeys made by 20,000 unique users of the bike share scheme since its inception. The car club was well used pre-COVID, with cars booked 38% of the time; nearly double the figure that is generally considered high usage, 20%.

Impact of COVID-19

The COVID-19 pandemic and associated lockdowns and restrictions have fundamentally changed day-to-day life for almost everybody. The impacts on transport have been particularly profound, with the number, type and mode of trips all being changed. Whilst some of these changes will have been temporary reactions to the situation, some are likely to become permanent changes to the way people travel. 40% of respondents to the Watford Travel Survey believed that COVID-19 would permanently change the way they travel.

13,000 journeys using the bike share scheme in May 2020, the highest total of any month from scheme launch to date

The pandemic is likely to have caused long-term changes in commuting, due to the increase in remote working. However, the proportion of residents recorded working at home in Watford was 31% in 2020, compared to 23% in 2019²¹, a smaller rise than may have been expected that implies for many working from home is not an option, and traditional commuting patterns will continue. Across the UK, for those who did not work at home prior to the pandemic, 10% believe they will return to their usual place of work full time, and 4% believe they will work from home full time, suggesting that a hybrid model will be the most common habit²². A reduction in business trips will likely be a further key consequence of the pandemic, with over two-thirds of people believing virtual meetings will replace some, or all, face-to-face interactions.²³ The move towards online shopping has meant internet sales since March 2020 in the UK made up on average 30% of total retail, compared to 19% in 2019, with consequent impacts on shopping trips²⁴.

Changes in journey habits are reflected in traffic data for Hertfordshire. In autumn 2021 daily traffic was around 10% below pre-COVID volumes. Traffic during the morning peak dropped by around 15% compared to a 10% decrease in the afternoon peak, and a 5% rise in midday traffic. A further impact of the pandemic has been a significant reduction in the use of public transport. By the autumn of 2021 national rail and bus usage had not risen above 72% and 82% of pre-COVID levels respectively.

In England 26% more cycling trips were made in 2020 compared to 2019²⁵. Cycling and walking were supported in Watford by schemes to create space for active travel and social distancing. Combined with the reluctance to travel on public transport, this will likely have led to some people permanently switching more trips to these modes.

The likely long-term impacts of COVID-19 on transport can be summarised as:

- A reduction in the number of commuting trips
- Fewer trips in the traditional peak hours, but more during the day
- Changes in patterns of commuting as people rethink where they live and when they travel
- A reduction in business trips as meetings increasingly take place virtually
- A reduction in individual retail trips, but an increase in retail deliveries



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- A prolonged reluctance to use public transport amongst a significant minority and consequent increase in private car usage
- An increase in walking and cycling trips amongst some people

However, the exact nature of these changes cannot be easily forecast, and there is a risk that much behaviour could return to pre-pandemic patterns without further policy intervention or changes to the transport network. The strategy has been developed to react to the likely impact of COVID-19, and individual initiatives will continue to be reviewed in response to changing behaviour and new evidence.

Issues and Opportunities

Based upon the review of the current situation, some key issues that the strategy will need to tackle, and opportunities that the strategy can build upon, have been identified. These are described below.

Issues

Areas of Deprivation

Around one quarter of wards in Watford are categorised as amongst the 30% most deprived in the UK. The availability and cost of transport will directly affect access to employment and thus income, the two factors that make up the greatest part of determining an area's level of deprivation. It can be seen from Figure 7 that some of the more deprived areas are in West Watford, and to the far north of the borough, where connections to the town centre are poor.

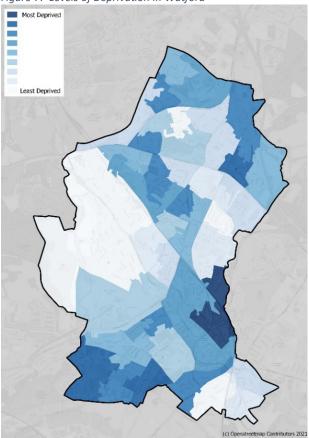


Figure 7: Levels of Deprivation in Watford

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Health is a further indicator assessed in judging deprivation, which, as discussed above, will be influenced by the extent to which the transport network encourages exercise or not. Watford scores 109th worst in the country for the indicator 'Living Environment', significantly worse than its overall deprivation rating of 195th. Two of the four indicators that make up the 'Living Environment' are the quality of air and volume of road traffic collisions involving people cycling or walking. Many of the more deprived areas in the borough are bisected or adjacent to busy roads with multiple lanes and the associated air and noise quality issues. This indicator therefore has a direct link to the transport network in the borough, and should be considered in transport planning decisions.

Prevalence of Private Motor Vehicles

The high proportion of trips being completed in a car creates a range of issues for Watford. For people driving, congestion is an issue, particularly during the peaks and at key hotspots, making for longer, and less reliable journey times. Average speeds during the morning peak and congestion hotspots are shown in Figure 8. Many car trips in Watford are short, and are encouraged by high car-ownership, which rose substantially in Watford over the last decade. The volume of traffic is connected to the number of people killed and seriously injured on Watford's roads, which exceeds 140 over the past five years, and disproportionately affects non-motorised road users, with several collision hotspots (shown in Figure 8). Being predominantly petrol or diesel engines, motor vehicles are a major contributor to Watford's greenhouse gas emissions. They cause air pollution, and two Air Quality Management Areas have been defined within the borough, meaning air quality is unacceptably low.

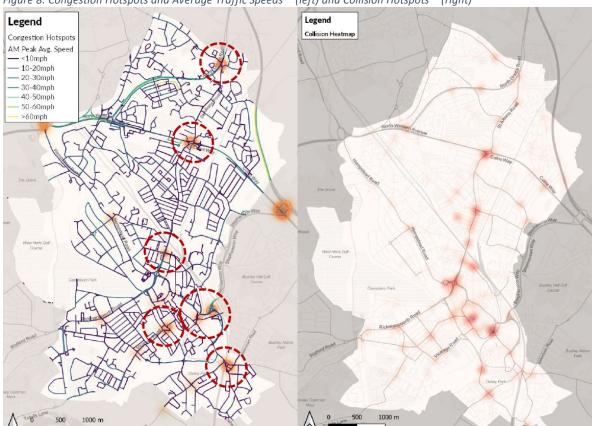


Figure 8: Congestion Hotspots and Average Traffic Speeds²⁶ (left) and Collision Hotspots²⁷ (right)

Low Levels of Active Travel

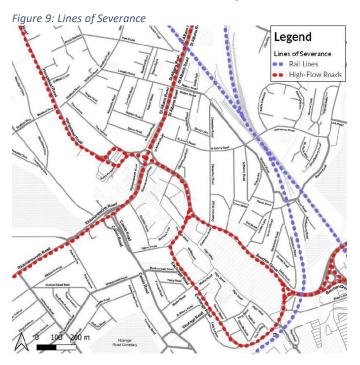
Given the size and urban nature of Watford, levels of active travel are relatively low. This is especially true of cycling, which makes up only 2% of journeys by Watford residents. In the Watford Travel



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Survey, fear of traffic, feeling unsafe, and a lack of high-quality infrastructure were amongst the most cited reasons for not cycling more.

The quality of the walking environment affects people's willingness to walk, and in places can make journeys very difficult for those with a disability, due to narrow, uneven footways, obstructions on footways and a lack of features to aid legibility. Feeling vulnerable, and the quality of footways were amongst the most common reasons for people not walking more according to the Watford Travel Survey. The wide or multiple lane carriageways and railways cause significant severance, particularly in the town centre, as illustrated in Figure 9, also make walking and cycling harder.



Mixed Public Transport Provision

Whilst the borough has multiple rail stations, these offer few opportunities for travel within Watford, or to other destinations in Hertfordshire, and in the case of the Abbey Line, service frequencies are low and irregular. Not all stations are fully accessible, and often lack key facilities for arriving and departing by sustainable transport.

The bus network is focused on the town centre, meaning not all areas are well served, with a lack of frequency and town-wide coverage being the key reasons given in the transport survey for not being used more. Journey times are affected by congestion, with relatively few bus-priority measures compared to many urban areas.

Limited Capacity

Watford has a relatively dense population, which is expected to rise over the next fifteen years, as well as increasing employment, meaning more trips within and into the borough. There is no space to expand the highway network, and the level of car ownership means in many residential areas it is difficult to park. Roads are often narrow, and finding dedicated space for vehicle traffic, parking, buses and people cycling is a major challenge. In addition, the network must cope with many trips passing through the borough. Around 20% of all cars on Watford's roads come from outside the borough and pass through without stopping, providing no local benefit²⁸. If the transport network is not transformed, it will soon be unable to function, as there is little space to fit in more private cars.



Opportunities

Geographical Scale

Watford is relatively small, has few hills, is densely populated and the majority of trips by residents are short. There is therefore a significant opportunity for more trips to be made by active modes, as the places people visit on a day-to-day basis are often within easy walking or cycling distance. This potential is reflected by Watford having the highest levels of walking and cycling in Hertfordshire. The boost in cycling and walking observed during the pandemic suggests that if people in Watford have the conditions where they feel safe and comfortable to cycle and walk, then they will choose to do so.

Existing Sustainable Transport Measures

Watford has already started the transition towards a more sustainable transport network with the implementation of cycle infrastructure improvements, a car club, a bike share scheme, on-demand bus service and the Watford travel app. This has been supported by the recent urban realm schemes, focusing on creating attractive spaces for people walking in particular. This provides a foundation on which to create a truly sustainable travel town.

Transport Corridors and Links

The rail network already provides good links between Watford and other destinations, as well as offering potential for improvements to serve more destinations or existing destinations more frequently. The borough benefits from having established highway links to motorways and other key regional destinations, which could also serve as public transport corridors. The disused Croxley Rail Line and the Abbey Line both offer the potential for new or enhanced public transport routes.

Future Mobility

Technological developments such as smartphones, 5G networks, contactless payment and electric vehicles, alongside societal change, such as the emergence of the sharing economy and a changing attitude towards car ownership amongst young people, are impacting the transport network. Watford is already tapping into this via its existing sustainable transport measures, but these changes are likely to offer further opportunities in the future, changing how people plan, pay for, and choose to travel. If harnessed correctly, this can be used to drive the switch to more sustainable travel in Watford.





Objectives

To determine the direction of the strategy and what it should achieve, a set of objectives has been developed to respond to the issues and opportunities, based upon feedback from both the Watford Travel Survey and discussions with elected Councillors and the Mayor of Watford. These objectives were tested and agreed via the strategy consultation and have been used to guide the selection of actions that make up the strategy for the future of transport in Watford and are shown below.



Cutting congestion: Reducing the number of car journeys by making cycling, walking or public transport the natural first choice for local trips.



Providing for future journeys: Investing in efficient and green ways to travel for both current and future residents and businesses.



Boosting health and wellbeing: Encouraging healthier travel choices that keep people physically fit and active, promote positive mental health, improve air quality, and make our streets safer.



Ensuring all our community benefits: Offering equality of access to transport for all.



Making best use of new technology: Providing green and environmentally friendly travel solutions.



Delivering a great customer experience: Promoting high quality, easy-to-use travel options.





Strategy Actions

Introduction

Enabling increased sustainable travel in Watford will require a range of actions. Some of these will be small-scale and highly local and others large-scale, capital intensive, infrastructure developments that will affect travel behaviour beyond the borough's boundaries. Many actions will be connected, with their success being dependent on each other. The strategy actions have been grouped into six key themes; active travel, town centre, longer journeys, alternatives to the car, supporting change and moving goods, each of which supports the overall strategy objectives.

Active Travel

Enabling more people to travel by active modes will bring benefits beyond transport alone. Whilst active travel primarily refers to walking and cycling, well thought-out design for these will serve people running, children using push-scooters, those in wheelchairs and other self-powered modes. The size of Watford, and the fact that 19% of trips made by residents are less than one mile and 68% are less than five miles, suggests a huge potential for walking and cycling¹⁴. However, less than a third of adults in Watford walk for travel, and fewer than 3% of adults cycle for travel, on at least three days a week²⁹. A lack of children walking or cycling to school misses a key opportunity to embed active travel from an early age. The benefits of active travel are clear:

- **Efficiency** on average 3.5m of road width dedicated to motor vehicles can transport 2,000 people per hour. If dedicated to cycling, this rises to 14,000 people per hour, and to walking, 19,000 people per hour³⁰.
- **Health** physical inactivity is responsible for one in six UK deaths and costs the UK £7.4bn annually³¹.
- Wellbeing twenty minutes of exercise a day cuts the risk of developing depression by 31%³².
- Life Expectancy regular physical activity reduces the risk of all-cause mortality by 30%³².
- Thriving High Streets increases of up to 40% in shopping footfall are generated by well-planned improvements in the walking environment³³.
- **Local Retail** people who walk to high streets spend up to 40% more in a month than people who drive³⁴.
- Busy High Streets people who walk make an average of sixteen monthly visits to their local high street, people who cycle will make twelve visits per month and those who drive will make eight monthly visits³⁵.
- **Business Productivity** employees who cycle regularly take 1.3 fewer sick days each year than those who don't³⁶.
- Climate Change and Clean Air walking and cycling produce no air pollution or greenhousegas emissions.
- **Cost Savings** the average cost to a person of walking per year is £0, cycling is £250 and running a car is £7,300 (in London)³⁷.

If all the value of these benefits is calculated in monetary terms, every £1 spent on walking and cycling infrastructure delivers on average £13 of benefits to the economy³⁸.

32% of car trips in Watford are less than two miles²⁸

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Active Travel Action 1: New Cycle Routes and Improved Footways Cycle Routes

At the core of enabling people to cycle is creating streets that are attractive and that people feel safe to cycle on. This requires allocating more space and priority to cycling. The biggest factor discouraging more people from cycling identified in the Watford Travel Survey was the lack of cycle infrastructure. The Watford and Three Rivers Local Cycle and Walking Infrastructure Plan (LCWIP) identifies the key routes upon which people are most likely to want to cycle, and the infrastructure required to enable everyone to cycle upon them. For most routes, this will mean a step-change in current provision, with a far greater emphasis on segregated cycle infrastructure and actively lowering traffic volumes, so that everyone from age 8 to 80 and beyond will feel safe using these routes. The network on the left in Figure 10 reflects the long-term ambition for a comprehensive cycle network, linking all major origins and destinations, so that at least 80% of the population of Watford would be within 400m (five minutes' cycling) of this network. The routes that are likely to deliver the most benefit, in terms of enabling the biggest increase in cycling, linking to more deprived areas and overcoming existing severance have been identified as priorities, and are highlighted on the map to the right in Figure 10.



Figure 10: LCWIP Cycle Network (left) and Priority Routes (right)

The priority cycle routes will form the focus of initial delivery, building on the existing network. The Local Cycle and Walking Infrastructure Plan will be reviewed within the next five years with a focus on identifying improvements for the remaining routes.

Active Travel Action 1a: An enhanced, borough-wide cycle network will be developed, with infrastructure designed to make everyone from age 8 to 80 feel comfortable using it. The priority for delivery will be the routes that will facilitate the most trips, connecting key origins, destinations and new developments.



Walking Routes

Alongside developing the cycle network, it will be similarly important to enhance the provision of infrastructure for walking in the borough. To encourage people to walk more, streets need to be attractive spaces that are pleasant to spend time in, often described as 'Healthy Streets'.

28% of trips by Watford residents are made by walking

Creating Healthy Streets means:

- Footways of sufficient width, free of clutter, with even surfaces that are easy to follow for all, including those with visual impairments
- Not being dominated by motor traffic and the inherent noise, pollution and safety implications
- Crossings that are easy to use and match where people wish to travel;
- pedestrian environments that are easy to use for everyone, irrespective of age or mobility
- Offering places to rest, providing shade and shelter, attractive urban realm and features that make journeys interesting

Many streets in Watford are dominated by traffic and the quality of footways and pedestrian provision varies. This is reflected in the quality of infrastructure and dominance of traffic being amongst the main reasons that people said they did not walk more in the Watford Travel Survey.

Survey Result: the top reasons people gave for not walking more included: feeling vulnerable, the quality of pavements and footpaths being poor, and air pollution and traffic making it

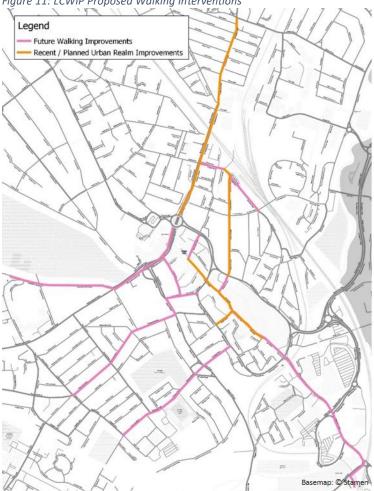
The Local Cycle and Walking Infrastructure Plan has identified the town centre as the initial priority for walking improvements, reflecting its position as the area of the borough where the most walking trips are undertaken, which also has busy main roads that are difficult to cross, and footways and pedestrian crossings of inconsistent quality on key approach routes. The key routes for improvement are shown in Figure 11, and will include new and improved crossings, better wayfinding, improved footways, and wider enhancements to the urban realm.





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Figure 11: LCWIP Proposed Walking Interventions



The improvements described will form the focus of delivery over the next five years, building on existing or recently implemented improvements, such as those to the High Street, Clarendon Road, the Watford Junction approach and St Albans Road. A subsequent iteration of the Local Cycle and Walking Infrastructure Plan will be expected to consider other core walking areas in the borough and identify the key walking routes that require improvements.

Active Travel Action 1b: Key walking routes within and linking to the town centre will be improved to provide streets that are attractive to walk and spend time in, as well as providing new and enhanced crossings of busy roads, particularly the ring road.

Clearly walking is not confined to just the town centre, and improvements to facilities for walking will be needed across the borough. A key part of this will be embedding a Healthy Streets approach into all future design. This means that whenever a street layout is changed or a new street constructed, the design will firstly take account of the Transport Hierarchy (i.e. consider the needs of people walking and cycling first), as well as considering the extent to which the scheme creates a Healthy Street, as defined above. It will be incumbent on new development to incorporate such design within proposals.

Active Travel Action 1c: Ensure that in all street design, the needs of people walking and cycling are put first.



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Being able to cross roads easily is a key factor in enabling people to walk as many journeys as possible. In many places in Watford this means using signalised crossings, often with two stages, such that crossing requires a separate green man to traverse each direction of traffic, with a wait in the middle. Signalised crossings can thus cause significant delays for people walking, making journeys less attractive. Insufficient length of the pedestrian-crossing phase can also cause difficulties for people with restricted mobility, making using these crossings intimidating. Hertfordshire County Council have recently conducted a review of signal timings at a number of locations, adjusting where possible to reduce delays for pedestrians and extend the length of the pedestrian-crossing phase. This practice should be continued on a regular basis.

Active Travel Action 1d: Continue to review and improve pedestrian crossings, making sure they are designed to be inclusive for all users.

Whilst some schemes will take time to implement, there are many small changes or 'quick wins' that could make walking and cycling easier, with minimal expenditure. These could, for example, include updating signposting, resurfacing, removing barriers on desire lines, adding dropped kerbs or tactile paving, or decluttering footways.

Active Travel Action 1e: Identify and deliver 'quick wins' for walking and cycling in collaboration with Watford residents and businesses.

Active Travel Action 2: Expanded Cycle Parking

If the number of people cycling in Watford increases, the amount of cycle parking will need to increase too. Cycle parking at new homes is dictated by the standards set within the *Local Plan*, it is important that the council ensures that the parking delivered meets these standards and is high-quality, convenient, and secure, so it can be used by all. Many existing homes do not have a practical place to keep cycles. To allow more people to store a cycle securely where they live, cycle hangars can be installed. These can provide a secure facility for cycle parking, for which residents pay a small fee for exclusive access. A trial launch could focus on an area where residents have limited space to store a cycle at home and are near existing or planned cycle routes. Engagement with Housing Associations offers a further avenue for identifying locations for, and the delivery of, cycle hangars.

Active Travel Action 2a: A trial scheme of cycle hangars for residents in an appropriate area.

Beyond residential areas, cycle parking should be provided in the places people want to go, whether this is work, school, local high streets, a rail station or other destination. To increase the volume of cycle parking at schools and workplaces, a scheme could be introduced to assist with installation. As with the cycle hangars, priority could focus on places where children or employees are most likely to cycle or there is demonstrable demand.

Active Travel Action 2b: Investigate schemes to support the delivery of cycle parking in schools and workplaces.

Ensuring on-street cycle parking on high streets, rail stations and at other community destinations meets demand will help enable people to cycle within the borough. To ensure supply is appropriate, a two-fold approach of auditing the usage of existing supply, and making it easier for the public to report locations where more cycle parking is required could be used. A further strand will be to ensure cycle parking locations integrate with the bike share scheme. This would create locations that are



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known for both types of cycle parking, to aid usability for people who cycle. Installation will then be targeted at the key locations identified in this strategic manner to ensure the maximum value is gained from new cycle parking.

Active Travel Action 2c: Audit cycle parking, create a suitable community feedback website location to identify new locations for cycle parking and adopt a strategic approach to delivery.

Active Travel Action 3: Bike Share

A bike share scheme was launched in Watford in March 2020. 200 pedal bikes and 100 e-bikes are available to hire from over 70 bike share parking locations across the borough. On completion of all planned cycle-parking bays, 90% of the population of Watford would be within a five-minute walk of a bay. Providing a bike share scheme provides an option for people who don't own a bike and visitors to Watford to cycle. It makes more journey-type combinations possible or easier, for example cycling in one direction, but returning by a different mode, or cycling to or from a bus or train stop at the beginning or end of a journey, completing the 'last-mile' sustainably.

Survey Result: 35% respondents cited not having a bike as reason for not cycling more.

Whilst significantly impacted by COVID-19, the bike share scheme has been well used since launch, with 20,000 unique users making over 180,000 journeys by the end of 2021, exceeding 100,000 hours of travel. Over the next three years, the priority will be completing the delivery of all 83 proposed bays, monitoring the use of the scheme, and making sure that it is meeting its objectives, and if not, identifying why. Currently all bays are within Watford, completion of delivery could include targeting of specific sites outside the borough if these serve key destinations for Watford residents.

Active Travel Action 3a: Complete delivery of the bike share scheme, monitor usage against objectives and identify modifications required as necessary.

Over the longer term the focus will be making sure the bike share scheme's value in supporting sustainable travel is maximised, by:

- Ensuring that larger development sites include bike share bays, as required in the Local Plan
- Delivering integrated standard cycle parking and bike share bays at key locations
- Making sure that the scheme continues to meet demand, increasing density as required at key locations
- Considering wider expansion into neighbouring boroughs, potentially through a partnership arrangement
- Exploring options to enhance the social value of the scheme through providing training for users, or reduced cost access for certain groups

604,000km travelled by Watford bike share users to date

There has been a rapid increase in the use of e-scooters in the UK and beyond in recent years. Currently their use on public highways is legal only when hired from a designated trial scheme, which are taking place in towns and cities across the country. The impact of these trials is being monitored, and reviewed by the Department for Transport. Changes in national legislation will be required before there is any consideration of inclusion of e-scooters in the sustainable transport make-up of Watford. It is recommended Watford monitor the situation and respond to evidence and national changes.

Active Travel Action 3b: Ensure that Watford continues to offer a shared sustainable transport scheme that meets the needs of the borough and links to other sustainable transport options.



Active Travel Action 4: Healthier Neighbourhoods

Residential Streets

High traffic volumes are one of the biggest factors in discouraging people from walking and cycling. Different streets have different purposes, whilst main roads must serve to allow people to move from one place to another, local streets are primarily places where people live, shop or work. Therefore, motor traffic travelling from one place to another should primarily be on main roads, which, generally being wide, are designed for higher levels of traffic, with traffic lights to control junctions. Local streets are mostly designed to accommodate lower levels of traffic. They should not be overwhelmed with through traffic, often referred to as 'rat running'. Where this happens, they are unlikely to be places where people enjoy, or feel safe, walking and cycling. Therefore, to enable everyone to feel comfortable travelling by active modes on these streets, it is necessary to reduce and slow the volume of traffic and provide priority for people walking and cycling.

Walking and cycling make up 30% of trips in Watford, but 56% of victims of fatal or serious collisions

An established, and successful, approach to reducing this traffic is implementing 'modal filters', which allow the passage of people walking, cycling, and if necessary, buses, but not motor traffic. This is a not a new concept for Watford, but one that has already been implemented in many streets.





³⁹; it will,

however, stop people driving through streets not designed for high volumes of traffic, with no benefit to the people who live there. This approach has been shown to lead to increases in the numbers of people walking and cycling ⁴⁰, a decrease in road-traffic injuries ⁴¹, as well as leading to fewer car trips, as people are no longer driving for as many journeys. The success of such schemes is dependent on community involvement in their design, and ensuring filters are put in the correct place. The use of temporary filters such as planters means these can moved with relative ease, and can be trialled and modified as required. Monitoring of a scheme's impacts will be crucial, and they should be designed with the flexibility to respond to any issues arising. Further analysis of potentially suitable neighbourhood areas will be completed and engagement with the community will be undertaken to identify the desire for healthier streets amongst residents and businesses. Where this does exist, measures will be implemented as a trial, and monitored carefully, before deciding on whether to make them more permanent.





Active Travel Action 4a: Trial new traffic filters to create healthier neighbourhoods, developed in collaboration with local communities. Monitor and evaluate their impact, before deciding whether to retain, modify or remove.

School Travel

High volumes of traffic frequently affect the roads where schools are situated, meaning parents are unlikely to be happy with their child walking or cycling to school. This contributes to a dependence on the car for the school run, leading to a key missed opportunity to increase the amount of exercise children undertake, and to embed active travel behaviour from an early age. Watford is in line with the national average, in that 20% of Year 6 pupils are classified as obese⁴².

Survey Result: fewer than 40% of respondents said Watford was a place where they were happy for their children to walk to school and less than 20% were happy for them to cycle

One potential way of reducing school traffic is to implement School Streets. These prohibit all school and through traffic from driving down a street where a school is located, during pick-up and drop-off periods. This can be enforced either by temporary barriers or cameras. This approach has been widely adopted in Scotland and London, with evidence suggesting that it reduces overall levels of traffic and leads to increased active travel to schools ⁴³. It is not an approach that is appropriate for all schools and streets, and is subject to changes in legislation to support Local Authority enforcement. School Streets offer a potential new initiative in Watford to be considered within the school travel planning process. They should be seen as a measure within a wider toolkit of initiatives that will only be successful where a range of key criteria are met, including the school having a travel plan, with a strong record of encouraging active travel and engagement with Hertfordshire County Council's Active Travel Team, and the street network being appropriate. Where this is the case School Streets will be explored and, in conjunction with close engagement with staff, pupils and neighbours, could be trialled.

Active Travel Action 4b: Consider the potential for School Streets as part of the toolkit of school travel plan initiatives and identify whether there are opportunities to trial them. Monitor and evaluate their impact before deciding whether to retain, modify or remove.

Active Travel Action 5: Welcoming Street Space

The way the space on streets is used should be balanced between the needs of all users, including people walking, cycling, public transport users and motor vehicles. At present, the dominant use of space not being used by moving traffic, walking or cycling is that of car parking. Transport infrastructure, such as cycle parking, bike share bays, and electric vehicle charging is nearly always found on the footway, which creates clutter, narrowing the available space, with particularly negative impacts on people with visual impairments, in wheelchairs or pushing a child's buggy. However, given that driving and cycling takes place in the carriageway, these items will serve users better or equally well by being in the carriageway.

There are plenty of alternative ways in which the kerb could be used to make streets more attractive places, where this is desired by local residents and businesses. Parklets are one such use, whereby kerbside space is used to create community areas, designed by local residents or businesses, with items such as benches, plants or art. These can serve as a resting or meeting point, a space for outdoor eating or dining or other community use, improving the quality of the street for all. Parklets are most successful where the local community is involved in the design, allowing them to identify the elements



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they would most like to see in their neighbourhood. Other uses of the kerb could be: cycle hangars, car club spaces, electric vehicle charging, standard cycle parking, or bike share bays.

This approach creates an opportunity to add plants to Watford's neighbourhoods, making them greener, and bringing a wide range of benefits, including making streets more visually attractive, increasing biodiversity, offering shade or shelter, improving air quality, reducing stress and improving mental health ⁴⁴. To address concerns about the loss of parking in densely populated areas, measures will initially be investigated in areas with less demand for on street parking. Vehicles parked on the footway also add an obstacle to people walking, particularly those with a disability. The Department for Transport in 2020 consulted on the management of pavement parking to which Hertfordshire County Council's response was to support legislation for a national ban on footway parking.

Active Travel Action 5a: Encourage community-led pilots of parklets to be trialled where there is local interest, space and community support. Where appropriate, locate cycle parking, bike share bays and electric vehicle charging on the carriageway, whilst working to reduce pavement parking.

Amir's travel story

18 year old student at Westfield Community College

Currently...

- · Amir lives with his parents in Oxhey
- He walks to college, which takes 30 minutes, or his parents give him a lift when it's raining
- After college he takes the bus into town where he works part time at Primark. It takes 22 minutes
- He has a bus pass which costs £49 per month
- The bus is usually full by the time he gets on, meaning he has to stand for the whole journey
- He then takes the bus home from work, a 14 minute journey

Total daily travel time: 66 minutes

In the future...

- There is now a bike-hire bay near Amir's home. He gets reward points when he cycles through the app he uses to book the bike, and spends the points on coffee when he meets his friends. He no longer needs his parents to drive him around
- Amir now jumps on a hire bike on the way to college, taking 12 minutes
- He has stopped buying a bus pass, and buys minute bundles for the bike hire service
- For the journey between college and work, he takes the new public transport service on the former MLX line (10 minute journey), which is quicker and more comfortable than taking the bus
- He usually cycles home after work as he now feels safe using the improved cycle lanes, a 9 minute journey, leaving the bike in a docking station near his house

Total daily travel time: 31 minutes

Saving: 35 minutes





Longer Journeys

For longer journeys, particularly those in and out of the borough, active travel will not always be feasible. To maintain and enhance the position of Watford as a place people visit for work, shopping and leisure, it is important that travel in and out of the borough is easy and efficient. Currently around three quarters of trips into Watford are by private motor car, but this creates pollution, congestion and roads that are difficult to cross. Alternatives to driving must therefore be provided that enhance and make best use of Watford's existing public transport network, as well as offering entirely new journey choices. More widely available, affordable public transport was the most common request amongst all respondents to the draft strategy consultation.

Average speeds on many roads in Watford are less than 10mph in the morning

Longer Journeys Action 1: Prioritising Buses

Improved Journey Times

Watford has bus connections to the north-western area of London, St Albans, Hemel Hempstead and other towns within Hertfordshire. There are good connections between some of the bus and rail networks in the borough. Most residents live within walking distance of a bus stop. Despite this potential, usage of buses is low. Key reasons for low bus usage provided by the Watford Travel Survey included: low frequency, insufficient route coverage, speed and cost. Improving bus infrastructure will help enhance the experience of bus passengers, alleviating delays and improving reliability and thus encourage more people to use them. Key hotspots that delay buses in Watford have been identified in conjunction with local bus operators as part of the Hertfordshire County Council Bus Intalink Partnership. The Intalink Partnership has identified potential measures at some of these hotspots to reduce bus delay, and they have been incorporated in the Hertfordshire County Council Bus Service Improvement Plan. The location of these key bus routes for priority schemes are shown in blue in Figure 13. Funding is available to start delivering improvements on these routes, and preferred schemes will be developed via collaborative working between Hertfordshire County Council and Watford Borough Council.

Fewer than 5% of Watford residents commute to work by bus¹⁶

Improvements could include installing new sections of bus lane and giving buses priority at signals. Delivering these types of improvements is key to reducing delays for buses in Watford. These routes overlap with priority routes for cycling, and any bus improvements will need to align with these proposals. Additional routes for improvement will considered subsequent to these key hotspots.

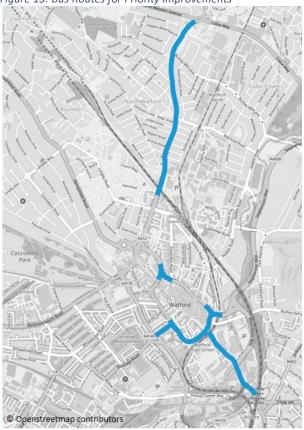
Survey Result: Frequency, route coverage and speed were the top three reasons people didn't use the bus more





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Figure 13: Bus Routes for Priority Improvements



Longer Journeys Action 1a: New bus-priority measures will be developed on key corridors to reduce delays to buses at delay hotspots. Balance will be sought between the needs of buses and cycling, respecting the travel hierarchy.

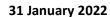
Better Bus Stops

In addition to making bus journeys quicker, it is important to make getting on and off buses as easy as possible. Bus stops across the borough have been identified where improvements can be made relatively easily to improve accessibility for all users by improving the footways or other facilities at the bus stop. These proposals include measures to ensure that the bus stop is kept clear, or moving stops from lay-bys to on-street stops, creating 'bus boarders' so that buses can easily approach and leave the stop. These bus boarders:

- Reduce overall time spent at the bus stop
- Create additional footway space for passengers to wait
- Improve bus reliability by keeping the position of buses in the traffic stream
- Discourage parking or loading in bus stops
- Significantly benefit mobility-impaired passengers by reducing the likelihood of needing to step into the road⁴⁵

More live journey-time information boards will be installed, so that passengers know how long they have to wait for the next bus. Twenty bus stops have already had such improvements delivered, with another twenty planned over 2022.

Longer Journeys Action 1b: Improvements to bus stops will be delivered to improve accessibility and ensure buses can easily approach and depart from stops.





Improved Ticketing

A core objective of the *Bus Service Improvement Plan* is to make fares easier to understand and provide confidence to passengers that they will be charged the best value amount. Cashless fares and technology development offer a major opportunity to move towards more integrated ticketing. By using technology passengers can automatically be charged the cheapest fare, including when interchanging between modes, without a need for paper tickets, making for a simpler, better value experience. A phased approach to improving ticketing has been identified in the *Bus Service Improvement Plan* to move from the current system, that contains some 'smart' ticketing aspects, to a fully integrated multi-modal model.

Longer Journeys Action 1c: Encourage the enhancement of bus ticket options, moving towards an integrated, multi-modal offer that utilises contactless and smartphone technology, whilst remaining accessible to all.

Accessible Bus Services

Some bus services remain difficult for some potential passenger to uses, with a range of further steps required to make bus services truly accessible to all. Steps identified in the *Bus Service Improvement Plan* include:

- Disability awareness training for drivers
- Investigating internal changes, for example twin wheelchair spaces, to see if they can be installed locally and retrospectively
- A standard for clear/legible destination blinds
- All bus information to be made available in large print/Braille/other languages (all on request, but ensure it is widely advertised and publicised)

These will progressed via bus capacity funding and a full bus accessibility strategy will be developed.

Longer Journeys Action 1d: Support investment in measures to make bus services more accessible and inclusive.



Longer Journeys Action 2: Rail Enhancements

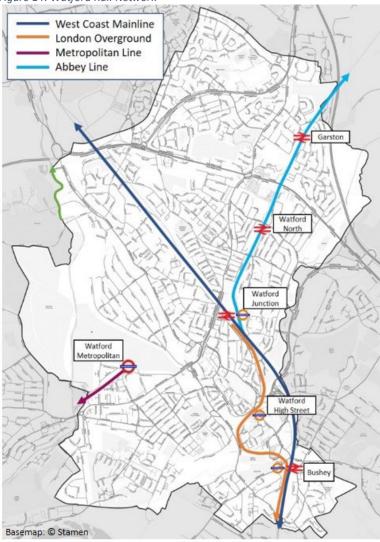
Watford benefits from good rail connections, with frequent, direct connections to London, the Midlands and further north. Six rail stations within the borough serve the West Coast Main Line, London Underground and Overground, and the Abbey Line. Stations on the West Coast Main Line or connected to the Transport for London network were well used prior to the impact of COVID-19, with over eight million people entering and exiting Watford Junction a year, and more than one million

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each at Watford High Street, Watford Metropolitan and Bushey Stations. With rail offering a fast and sustainable transport offer for journeys, it is important that its role in the transport make-up of Watford is maintained and enhanced. Rail routes and stations are shown in Figure 14.

26% of trips out of Watford are made by rail⁴

Figure 14: Watford Rail Network



Sustainable First and Last Miles

If as many people as possible are going to use the rail network, it must be easy to get to and from the stations in Watford. This means ensuring that stations are attractive places to walk or cycle to, appropriate facilities are provided to store cycles, and that they are linked to the bus network with conveniently located bus stops. An audit of all stations in Watford has been completed, identifying the elements that could be enhanced at each station. Central to these are:

- Footway improvements on approach roads and crossings
- Enhanced cycle route provision, with formal cycle routes linking to the proposed *Local Cycle* and *Walking Infrastructure Plan* network where stations are not directly adjacent
- Increased and improved cycle parking
- Additional bike share bays



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- Electric vehicle charging
- Disabled parking bays
- Bus stop relocation and provision of real-time information at stops
- 20mph zones around stations

Many of these measures could be classified as 'quick wins' and thus delivered in the short term. In the longer term, consideration could be given to improving bus connections, particularly increasing frequencies of services during peak periods; integration with other modes of travel is a key aim of the *Bus Service Improvement Plan*.

Longer Journeys Action 2a: Improve sustainable transport infrastructure at and on the approach to stations to support sustainable first/last mile trips and encourage rail usage.

Accessible Stations

Everyone should have equal access to the rail network, however, not all stations were built to be fully accessible. Only Watford Junction, Watford North and Garston have fully step-free access, but they lack some other elements that aid accessibility. Improvements are therefore required to make all stations in Watford fully accessible. Whilst some of these measures are relatively simple, such as coloured handrails on staircases or coloured, tactile paving on platforms, providing step-free access throughout is significantly more complicated. Delivery of this action will not be Watford Borough Council or Hertfordshire County Council's responsibility, with collaboration, support and lobbying required with train operating companies, the Department for Transport and the potential new public body, Great British Railways, to make the case for prioritising these improvements in Watford.

Longer Journeys Action 2b: Support and lobby for improvements to the accessibility of stations in Watford, through delivering both minor and major improvements to make all stations fully accessible.

Safe, Comfortable, Easy-to-use Stations

Rail stations should provide places that feel safe for all users, as well as offering a pleasant customer experience. This means ensuring they provide a welcoming environment, including features such as cover from inclement weather, places to sit, and making journey information required readily available, with real-time information boards the standard for this. The station audit that was undertaken in the development of this strategy identified a range of facilities that could be added to the stations in Watford to make them more attractive for users. These include missing features such as:

- CCTV
- Refurbished shelters
- Real-time passenger-information screens

As with accessibility improvements, the installation of these will be dependent on close working with those who operate and manage the stations.

Longer Journeys Action 2c: Lobby for and support the enhancement of the quality of rail stations to make them as safe, comfortable and easy to use as possible.





The Abbey Line

The Abbey Line is a 6.5-mile local railway line running from Watford Junction to St Albans Abbey with five intermediate stations, including Watford North and Garston in Watford. As it is single track, service frequencies are currently limited to every 45 minutes. It provides a useful link for residents into Watford town centre, as well to connect to onward bus and rail services from Watford Junction (for example, to reach Watford General Hospital), plus serving major events, such as Watford Football Club matches and trips to St Albans.

475,000 trips on the Abbey Line in 2019

To encourage greater use of the Abbey Line, as well as completing the station improvements in the actions above, passenger surveys suggest that frequency and reliability improvements are key. This aligns with Hertfordshire County Council's *Rail Strategy* aspirations to have a higher-frequency service departing at consistent, regular intervals. Later-running services are a further ambition for the line. As delivery of this action will not be Watford Borough Council or Hertfordshire County Council's responsibility, work will focus on supporting and lobbying the relevant organisations for these improvements.

Watford Junction

Watford Junction is a major regional transport hub, with a mixture of local and regional rail services. In addition, it acts as a major bus and coach stop, plus pick-up point for shuttle services to the Warner Bros. Studio. Watford Borough Council and Hertfordshire County Council support the redevelopment of the area around the station, and substantial improvements to Watford Junction to ensure that the infrastructure is appropriate to its regional importance, and allowing it to function as a true multimodal hub. These proposals include:

- New pedestrian/cycle bridges over the railway lines
- An upgraded bus station
- Integrating bus, rail, cycle, taxi, coach and future public transport with the rail station
- Relocated car parking provision (including in a new transport hub to the east of the station)

Over 8 million passengers at Watford Junction in 2019⁴⁶

Delivering these will make Watford Junction a key focal point for sustainable travel, allowing people to easily switch between modes, as well as complete the first and last mile of their journey by means other than private car. Delivery of the comprehensive redevelopment of Watford Junction will not be a Hertfordshire County Council or Watford Borough Council responsibility, but both councils will support, lobby and use appropriate planning powers.

Longer Journeys Action 2e: Ensure the development of Watford Junction as sustainable mobility transport hub as part of the wider redevelopment of the station and its environments.

In addition to improvements to the station, Hertfordshire County Council's *Rail Strategy* highlights ambitions for further extensive rail connections from Watford Junction, especially on inter-city services, both improving existing frequencies and adding new routes. This increase in service provision



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will help encourage people to travel by train to and from Watford for trips across the region and beyond, for all journey purposes.

Longer Journeys Action 2f: Encourage increased service provision for Watford Junction on local, regional and national routes, including airport connections.

Sean and Esha's travel story

Early 30s commuters living in Stanborough Park, North Watford

Currently...

- Esha works in central London and Sean works for the NHS and is based in Watford town centre.
- The couple have a car which Sean parks at the Town Hall after dropping Esha off at Watford Junction station for her train into central London.
- They have a parking ticket for the Town Hall, and Esha pays for a monthly train ticket
- Sean hates sitting in traffic every morning, which means they set off earlier to ensure they catch Esha's train.
- Sean knows the NHS is encouraging its staff to travel into work sustainably to help reduce parking issues and the borough's environmental impact, but he can't see how else their commutes would work. He would be open to cycling but doesn't have anywhere to store his bike in their flat.

Monthly travel costs:

Parking pass for Watford Town Hall: £110 Car running costs (inc. petrol): £150 Train tickets from Watford to London: £325 Total: £585



In the future...

- Sean applies for a bicycle hanger to be placed on their street, giving him somewhere safe and easy to store his bike.
- Esha has switched to working from home three days a week, and uses a flexible rail ticket for her journey into London.
- Sean now cycles to the Town Hall using new segregated cycle lanes which also give him priority at junctions. He makes his other regular journeys by bike due to the improved cycle infrastructure across town.
- He no longer buys a parking ticket for the Town Hall, saving him money each month.
- Esha walks or uses a Beryl Bike to travel to Garston Station where she takes the new more frequent trains on the Abbey Line. Her journey time is similar to when they drove and more reliable due to not getting stuck in traffic.
- They decide to sell their car, which grants them mobility credits which they use to join the local car club. This means they still have access to a car when they need one.

Monthly travel costs:

Bike Hanger: £6 Bike running costs: £5 Beryl Bike costs: £10

Public transport (Abbey Line) costs (£4 x 8 days): £32 Typical spend on Car Club service: £50

Typical spend on Car Club service: £50
Flexible train ticket from Watford to London £144

otal: £247 Saving: £338

Longer Journeys Action 3: Enhanced Public Transport

Watford to Croxley Link

The former Croxley Rail Line is safeguarded within the *Local Plan* for use as a transport corridor and is expected to be transformed into a public transport route, potentially with parallel cycling and walking infrastructure. This will provide a significantly enhanced connection between the town centre, West Watford and Croxley that also links to the London Underground network.

Longer Journeys Action 3a: Identify and deliver a public transport system that makes use of the former Croxley Rail Line.

Hertfordshire Essex Rapid Transit

The proposed Hertfordshire Essex Rapid Transit (HERT) will improve the passenger transport network across the region through providing an accessible, reliable and affordable east-west system. It will have the potential to carry people in greater numbers than equivalent roads, and provide more convenience and reliability than a traditional bus service. HERT will have a public transport link to Watford via St Albans making use of the Abbey Line corridor and potential onward connections to West Watford via the Watford to Croxley link. This will provide connections from Watford to St Albans, Hemel Hempstead and further east in the county and onwards to Essex. Such a system will be transformative with respect to east-west connections in the county, benefiting both Watford residents and those visiting and working in the borough. HERT is a long-term project, with many aspects still to

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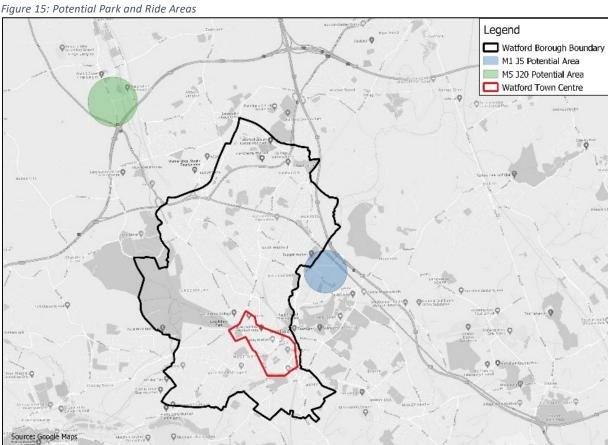
be developed. Watford Borough Council will seek to protect corridors for links to the system and aim to ensure key infrastructure hubs like Watford Junction are advanced in such a manner as to incorporate connections to HERT.

Longer Journeys Action 3b: Support the development of a potential HERT connection to Watford.

Longer Journeys Action 4: Park and Ride

Not all trips into Watford will come from locations on either a rail or bus route. This means these people will choose to drive if they are visiting Watford. Park and Ride provides a means to encourage people to leave their cars outside of the town centre and complete the final part of their journey by public transport. Park and Ride has the potential to significantly reduce the number of trips, and therefore congestion, in Watford. In addition, if introduced, it will reduce the demand for car parking in the town centre, freeing up space for other uses. Hertfordshire's Growth and Transport Plan identifies two areas for potential Park and Ride for Watford to the north and east, with further examination required to identify viable sites.

74% of commuting trips into Watford are by car16



Sites would require proximity to motorways to ensure they are easily accessible by car, as well as offering the potential to support trips for local areas. Alignment with the existing rail network could create a transport hub for the area, with the potential for people to travel by rail, as well as by bus. Access to the Warner Bros. Studio Tour could also be facilitated from an appropriate location. In addition, the sites could also serve wider sustainable transport uses to benefit those who live nearby.



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These could include facilities such as rapid electric vehicle charging, cycle parking and maintenance, or car club spaces.

Initial analysis of potential trips suggests that Park and Ride could be viable and well used when combined with the implementation of other measures within this strategy to promote sustainable transport. The cost of the Park and Ride would need to be much lower than parking within the town centre.

Significant work is required to establish the feasibility and viability of Park and Ride options, both with respect to the siting of the parking element and the necessary supporting measures. Currently, no specific sites have been identified for the parking. Following the adoption of the strategy, more detailed work will be initiated. This will include an assessment of environmental and land constraints, scheme impacts and the development of a business case. There will need to be close liaison with neighbouring councils, who would have to host the parking element, and may experience changed traffic patterns as a result. This strategy action is medium to long term and its progression is dependent on the ongoing feasibility work and business case development.

Longer Journeys Action 4a: Investigate further the feasibility of park and ride near Junction 20 of the M25 and Junction 5 of the M1, engaging with neighbouring councils and their communities.

Figure 16: Comparison of road space requirement⁴⁷









Alternatives to Car Ownership

Clearly there is a strong link between car ownership and the number of trips people make by car. If people are to have fewer or no cars in their household, they must be confident that they will be able to complete the journeys they need to make by other modes. Where people must drive, the aim should be that this is in the greenest form of car possible.

Alternatives to Car Ownership Action 1: New Car Club

Car clubs offer an opportunity for residents and businesses to have easy and affordable access to a car without the requirement to own one. Car club members book a conveniently located car and borrow it for specified amount of time, generally a few hours, or up to a day. Car clubs bring wider benefits to members and Local Authorities⁴⁸:

- On average, car club members reduce their car usage by 9% per week and increase the number of trips they walk or cycle after joining
- Each car club vehicle introduced results, on average, in nine private cars being given up by their owners
- Over 31,000 privately owned vehicles are no longer on the road in England and Wales as a result of car club membership
- Over one third of car club members report they joined a car club instead of buying a car
- Car clubs can offer significant financial savings over ownership, 20% of members in England and Wales state they joined due to being unable to afford a car
- Due to use of new and Ultra Low Emission Vehicles, car club vehicles emit an average of 40% less carbon from tailpipe emissions compared to the average car

Watford has had a small car club offer based at the Town Hall and analysis indicates there is significant potential for a much larger car club in the borough. Many of the key criteria of successful car clubs are found in Watford, including:

- High car ownership
- High population density
- Public transport connections for commuting trips
- Distances that can be walked or cycled between homes and local high streets or the town centre

In addition, the *Local Plan* requires developments in central Watford to be car-lite, meaning they have limited car parking, and includes a requirement from the developer to implement car club proposals. Car club vehicles need to be kept in a visible and convenient locations, with sufficient vehicle to provide confidence to members that one will be available within walking distance. A new expanded car club for Watford will be created, with cars distributed to match these requirements. Where possible, car club spaces will be prioritised in local car parks or other available space.

Alternatives to Car Ownership Action 1a: Create a new, expanded car club for Watford, utilising local car parks and other available space. Seek to link this offer with private developers' propositions.

Alternatives to Car Ownership Action 2: Taxis

Taxis and private-hire vehicles (referred to as the taxi fleet from herein) can, if managed appropriately, form a key part of a sustainable transport network. As with car club vehicles, they can offer residents and businesses the opportunity to complete journeys by car that could not easily be completed by



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other modes without the need to own a car. The taxi fleet can offer a level of accessibility to all that cannot easily be matched by other modes, and often provides vital transport for the elderly, vulnerable and those with a disability.

However, an excess of supply, the use of older vehicles, excessive idling, and circulating vehicles could undermine the sustainability of the fleet and thus the overall transport network in Watford. A sustainable transport network should include a taxi fleet that is environmentally friendly, has well-trained drivers who continue to provide a high-quality service and is accessible to all.

Licensed taxi fleet of around 340 vehicles in Watford

In order to create the type of taxi fleet that meets the strategy objectives, it will be necessary to incentivise the behaviours and vehicle types desired. Reductions in licence fees are currently offered for those driving electric or low-emission taxis in Watford. Further incentives could be considered, such as allowing green taxis only to utilise bus lanes and other bus-priority measures in the borough. In peak times this will likely provide significant journey-time advantages. This permission could be limited to drivers who have completed training to an appropriate standard. A similar approach could be endorsed to allow vehicles meeting the necessary standards access to areas where private vehicles are not generally permitted (but where bus and non-motorised vehicles are), or to access car parks for free to provide easy pick-up and drop-off.

Alternatives to Car Ownership Action 2a: Reduced licence costs for taxis and private-hire vehicles for zero emission vehicles and explore approaches to give priority access to bus lanes and other areas to green taxi-fleet vehicles.

High levels of parking pressure mean it is not always easy to pick up and drop off passengers in many areas of the borough. This could be alleviated through the implementation of taxi 'hotspots', which would take the form of one or two designated bays (which could, in addition, be for electric vehicle charging bays or car club vehicles) that could be used for pick-up and drop-off, but not waiting. These could tie in with locations where other transport provision is provided, contributing to local transport hubs. The expectation would be that such 'hotspots' would be located at strategic locations around the borough, within easy walking distance of community destinations or residential areas. Passengers would know that these were a place that they could easily get a taxi, with call-points included at the locations, but without the negative impacts related to idling vehicles caused by taxi ranks.

Alternatives to Car Ownership Action 2b: Investigate options to develop designated taxi hotspots at key locations around the borough.

To support drivers, and make for improved working conditions, a community facility could provide driver rest facilities. This could likely make use of an existing community location and would need to be strategically located to match where drivers are likely to be picking up or dropping off passengers, potentially tied in with a 'hotspot' location, and could also serve coach drivers.

Alternatives to Car Ownership Action 2c: Investigate options for a taxi-driver rest facility at an existing community location.

Alternatives to Car Ownership Action 3: Electric Vehicle Charging

Whilst a stated objective of this strategy is to reduce the number of car trips in the borough, it is accepted that many residents will wish to continue to own a car. Therefore, support should be provided to enable as many of these cars as possible to be electric, which offer the advantage over



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conventional petrol or diesel vehicles of not producing tailpipe emissions, thus reducing their negative impact on local air quality, compared to combustion engines. However, it should be recognised that they still have many of the drawbacks of standard vehicles, including emissions of pollutants from tyres and braking systems, encouraging inactive lifestyles and causing congestion and road-safety issues. Their contribution to reducing greenhouse gas emissions is dependent on whether the electricity used to charge the vehicles is from a green source. The production of the new cars, especially their batteries, is not carbon neutral and can have significant negative environmental impacts. Therefore, simply switching all the cars currently on Watford's roads to be electric will not solve many of the key issues for the borough or be the most effective approach to tackling climate change.

5,600 ultra low emission vehicles in Watford⁴⁹

To date, much provision of electric vehicle charging infrastructure in Watford has been focused on providing charging units near people's homes, through on-street charging sites, with associated designated parking bays. As of the start of 2022, over 40 publicly available electric vehicle charging points have been installed in the borough, which are shown in Figure 17. Further charging infrastructure is also be available inside private developments.

Electric Vehicle Charging Point

Figure 17: Watford Public Electric vehicle Charging Points 50

However, prioritising electric vehicle charging, both in terms of investment and use of road spaces, does not align with the transport hierarchy. With the phasing out of the sale of petrol and diesel cars by 2030, and the amount of housing in the borough without off-street parking, it will not be feasible to meet demand for all charging via on-street units. It should be expected that technology related to vehicle charging will continue to develop, with the speed of fast-charging units increasing. The



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combination of these two factors means that the medium to longer-term priority is likely to be providing charging infrastructure at key destinations, such as public car parks. Watford Borough Council will work with Hertfordshire County Council to deliver fast charging in public car parks and other highway land assets, whilst encouraging private land owners with car parks, such as major retailers or business parks, to do the same in line with Hertfordshire County Council's Electric vehicle Charging Strategy. It will be a legal requirement for new building to have electric vehicle charging points from 2022, aligning with the *Local Plan* requirement for a combination of active and passive provision at all developments providing car parking.

Alternatives to Car Ownership Action 3a: Support the delivery of additional electric vehicle charging spaces, with an emphasis on provision of more off-street charging at people's destinations.

Alternatives to Car Ownership Action 4: Demand-Responsive Transport

A demand responsive transport scheme was launched in Watford in July 2020 to provide new bus services, particularly on routes that are not served by the existing network. The service does not follow a fixed route, but picks up and drops off from virtual stops, with users booking the trip they wish to make via a mobile-phone app. Demand Responsive Transport can make a strong contribution to providing a sustainable alternative to car trips, through offering a service with much of the flexibility of a taxi, but at lower costs, with greater environmental efficiency, given the larger number of people carried by a single vehicle.

The service to date has been significantly impacted by COVID-19. The immediate onus is therefore on monitoring and maximising usage in line with the possibilities allowed by COVID-19 restrictions. As this usage evolves, it will be possible to optimise the level of service provision to demand in Watford, with wider transport initiatives that encourage sustainable travel and bus priority making it an increasingly attractive service.

Alternatives to Car Ownership Action 4a: Encourage and monitor the use of the Demand Responsive Transport system, matching the service provided to the level of demand.

Alternatives to Car Ownership Action 5: Mobile Phone App

Watford's mobile phone app can play a key role in supporting all the above modes that provide alternatives to car ownership, as well as enabling people to make better use of the existing public transport network and encouraging active travel. It already provides extensive information to help people plan their journeys, including:

- Journey-planning information for all modes, detailing timings, durations, modes, related carbon emissions and calories expended
- Live bus-journey times
- Links to bike share and demand-responsive transport app booking
- Information on cycle parking, electric vehicle charging and car parking

Survey Result: fewer than 50% of people think there is enough information to help plan journeys in Watford

The provision of accurate transport information in a single place can significantly improve the quality of people's journeys, and raise awareness of new transport schemes and services. Being able to compare different journey options, including the carbon-emission and health implications of these, will help to encourage people to use more sustainable and healthier modes.



Alternatives to Car Ownership Action 5a: Continue to enhance transport elements of the Watford app to maximise the value it provides in supporting and encouraging sustainable transport choices. Monitor its use and promote or adapt it as appropriate.

Alternatives to Car Ownership Action 6: Mini Transport Hubs

Transport hubs bring together multiple modes in a single location, increasing their benefit compared to each operating separately. Allowing people to seamlessly change from one mode to another takes away a key disincentive of using public transport, that of the time spent and inconvenience caused by changing between modes. They encourage people to complete their entire journeys by public transport by offering options for the 'first and last mile', such that people can easily continue their journey. Having a visible transport hub in itself promotes the concept of using sustainable travel simply through boosting its visibility, and they can act as a key source of travel information for users.

Whilst traditionally transport hubs are large, and connect primarily long-distance modes, for example Watford Junction, they can play a valuable local role. As the number of shared and sustainable transport options increases in the borough, it will help existing users and attract new users if they are well integrated. The hubs could provide bike share bays, car club spaces, electric vehicle fast-charging, Demand Responsive Transport virtual stops, taxi hotspots and cycle parking in a single location, with a consistent branding across the borough so that people become familiar with the concept of finding their nearest mini-hub. Other services, such as parcel lockers and transport information, could offer additional benefits and draw more people to using sustainable transport.

Alternatives to Car Ownership Action 6a: Investigate and develop mini transport hubs that combine multiple sustainable and shared modes in strategic locations around the borough.

Gareth, Annie and their kids, Sam (6) and Beth's (2) travel story

Young family living in Knutsford

Currently...

- Annie works at Watford Business Park, while Gareth volunteers as a Youth Worker in Watford town centre, and both drive to work
- They have two cars to manage childcare needs with commuting
- Sam attends Beechfield School which is slightly too far to walk to, so Gareth drives him to school before dropping Beth off at nursery. He then does the shopping or goes to the gym before his shift at work
- The family's doctor has told them that Sam's weight is higher than it should be for his age, and have recommended more daily exercise. His parents think cycling to school would help but they don't feel comfortable with him being on the roads
- Annie would like to upgrade to an electric car but she worries about finding places to charge it when out and about
- The family often struggles to find a parking space outside their home despite there being a CPZ in place

Monthly travel costs:

CPZ permits (x2): **£6.70** Car running costs (inc. fuel) (x2): **£25**0

Total: £256.70

In the future...

- Their neighbourhood is much quieter thanks to measures to reduce through traffic
- The family now feels comfortable making some journeys by cycling, including Sam's journey to school
- Following a trial loan from the Council, Gareth bought a new cargo bike which he can use for taking Beth to nursery and carrying shopping. He also rides with Sam to school when he can
- Gareth has sold his car, and Annie has upgraded hers to a new electric model. She can charge it up at work as new charging points have been installed near her office
- Finding a parking space near their house is much easier now as they only have one car. There is also more cycle parking in convenient locations across the town, including spaces for cargo bikes, meaning they feel confident whenever they use it
- Sam's doctor says the cycling is already having a positive impact on his weight and overall health.

Monthly travel costs:

CPZ permits (x1): £2.10 Bike running costs: £5

Electric car lease (Nissan Leaf) : **£200 + £1,800 initial cost** Electric car running costs (inc. electricity): **£70**

Total: £277.10 (+£1,800 initial

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The Town Centre

Many of the shops, employers, and leisure activities in Watford are found in the town centre. It is the destination of many trips by both residents and visitors to the borough. It is important that it is easy to travel to, from and around the town centre by active and sustainable means, to ensure it maintains its position as a vibrant and attractive economic centre. The current layout of the highway network largely works against the objectives of this strategy, with wide, multiple-lane roads creating intimidating places to walk or cycle, whilst offering minimal advantage to public transport options. The road system caters for many motor vehicle trips passing through at no benefit to Watford. Changes to this layout would allow the town centre to maintain its role as an important regional hub, rather than one that is overwhelmed by traffic and congestion.

Around ¾ of trips into Watford are made by car¹⁶

Town Centre Action 1: Pedestrian and Cycling Access

The layout of the highway network around the town centre creates significant barriers to accessing the High Street and many other destinations around the centre of the town. The ring road effectively cuts off the High Street from the rest of the town, with people cycling and walking having limited safe crossing opportunities. Existing crossings generally do not encourage walking and cycling either, often requiring people to deviate from their preferred route, use an underpass, or experience an extended wait at traffic signals. Similar experiences can be found in crossing Rickmansworth Road to the north, or navigating Dalton Way to the south.

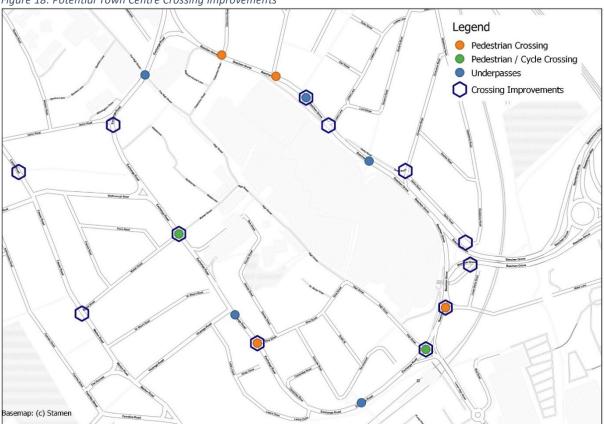
Survey Result: one in five respondents cited main roads being difficult to cross as a reason not to walk more

To make it easier to access the High Street and surrounding roads by foot or cycling will require both improvements to existing crossings and implementation of entirely new crossing opportunities. This process has been started, with recent improvements to the Clarendon Road / Beecham Grove junction crossing. The design of new crossings should be based upon the Healthy Streets principles discussed in Active Travel Action 1: New Cycle Routes and Improved Footways, as well as observing the transport hierarchy that prioritises people cycling and walking, therefore resulting in a change to the status quo that puts space for motor vehicles and minimising their journey times first in much of the current layout. These crossing improvements will tie in with the walking routes prioritised by the LCWIP, as well as new development in the town centre, for example, around the Town Hall, where a surface-level crossing of Rickmansworth Road will be investigated. Existing crossings, and those that could be improved or areas where new crossings could be explored are highlighted in Figure 18.









The Town Centre Action 1a: Continue to improve pedestrian and cycle-crossing opportunities on main roads around the town centre.

Town Centre Action 2: Prioritising Cycling and Public Transport

The nature of the highways around the town centre not only means that they are difficult to cross for people walking and cycling, but the space on the carriageway is not distributed fairly between different modes. Buses and people cycling must mostly mix with general traffic. The space given to private vehicles, some of whom will be passing through the borough, does not reflect the transport hierarchy and it does not align with the needs of people who live and work in Watford.

2,000 vehicles per hour on ring road in peak periods

To address this vehicle domination, it will be necessary to consider reallocating some space to modes other than motor vehicles on the carriageways around the town centre, including the ring road and Dalton Way. This would allow bus journey times to be improved, and create environments where more people feel safe to cycle to and through the town centre. Such changes would improve opportunities for Watford residents to visit the town centre as more journey options are created. In addition, it will make Watford a more welcoming place for visitors, benefiting the many businesses and employers within the town centre. Initial proposals for bus priority have been developed by the Intalink Partnership and will be finalised, consulted on, and delivered in the short to medium term. However, in the long term, a more major rethinking of what these roads look like will be required, with implications for traffic throughout the area. This will be dependent on significant external funding. This would be a long-term project that will need to follow on from the initial bus priority



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measures, improvements to pedestrian and cycle crossings, and provision of alternatives to car travel put forward in this strategy.

The Town Centre Action 2a: Develop the business case and long-term projects to reallocate space on the major carriageways for bus priority and cycle routes.

Town Centre Action 3: A Town Centre Sustainable Transport Hub

Public transport options within the town centre are not focused in any single location. Bus services terminate both on the ring road and High Street, whilst the main rail service access is found at the southern end of the High Street at Watford High Street station. This means it can be difficult for users to find a service they want, and interchange between services or modes will often require walking from one place to another. Having a single, centralised transport hub would help overcome these problems. This will make it easy to switch between modes, encourage people to complete the first and last mile by sustainable means (such as walking, cycling or bus), raise awareness of travel options, as well as offering a place where travel information can be found.

Survey Result: Public transport being quicker and more reliable was the most frequent response people gave that would make them use their car less

A travel hub could play a key role in encouraging new residents in the town centre and Colne Valley to make sustainable modes the default option for their trips. It could offer an opportunity to bring in new modes to the town centre, notably as a potential pick-up and drop-off point for coach trips, plus shuttle services to the Warner Bros. Studios. In the long term, the hub could have a further mode through being a key Watford Junction to Croxley link stop. As well as standard public transport modes, such a location could serve to provide for new and existing shared modes, including bike share bays, car club spaces and a demand responsive transport stop. A taxi hotspot could be integrated into this hub.

The ideal sustainable transport hub location would tie in with Watford High Street station, offering easy interchange between rail and other modes. It would help bring a greater focus to the southern end of the High Street and link with the aspiration for reducing the number of motor vehicles on the High Street.

The Town Centre Action 3a: Explore options for a sustainable transport hub within the town centre, preferably adjacent to Watford High Street station.

Town Centre Action 4: A People Friendly High Street

The High Street is a key local and regional destination and, as such, its urban realm should reflect its role, primarily as a place for people to visit, not a movement corridor. The improvements that have been made to the High Street over recent years reflect this, with sustainable and active modes being prioritised and encouraging the dwell time of residents. The measures first introduced to maintain social distancing, as a response to the COVID-19 pandemic, have further contributed to reducing the number of vehicles on the High Street whilst creating a safer, more attractive space for people walking and cycling. Given the active travel benefits brought by these measures, further opportunities to improve the feel of the High Street and adjacent streets will be pursued, including making permanent the changes first implemented as part of the COVID-19 emergency response. Longer term, a fully pedestrianised High Street could be envisaged, with access for deliveries and servicing maintained during appropriate time periods, diverted buses benefiting from the new measures implemented on



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the ring road and alternative stop facilities at a sustainable transport hub (as highlighted in the previous section). Taxi provision would be made at nearby locations, with enhanced walking routes from these to the High Street. When considering these changes, the potential impact on disabled residents, employees and visitors will be assessed in developing proposals, ensuring that access is maintained for all.

The Town Centre Action 4a: Continue to enhance the urban realm of the High Street and remove motor traffic where possible to create an environment that is as pleasant as possible to spend time in.

Town Centre Action 5: A Sustainable Transport Corridor

The High Street and Lower High Street provide a north-south spine through the town centre, linking with Bushey Station. Analysis suggests there are opportunities to restrict traffic and provide greater priority for people who walk, cycle and use buses for this corridor. The area around Lower High Street is earmarked for development in Watford's *Local Plan*, with new homes and businesses. To the south, Bushey Station provides access to the mainline rail network that is more convenient than Watford Junction in this area of the town. However, Dalton Way is dominated by motor traffic, making walking and cycling through this area unpleasant and difficult. There is an opportunity to create a sustainable transport corridor stretching from the Town Hall to Bushey Arches, through combining many of the improvements already discussed within this strategy, notably:

- The High Street being largely or completely free of motor traffic
- An improved crossing of Exchange Road between High Street and Lower High Street
- Walking and cycling improvements along the length of Lower High Street
- Reallocation of space to bus and cycle use around Dalton Way

The combination of these measures would put a strong emphasis on using sustainable transport modes for journeys between the High Street and Bushey Station. They would link into several other improvements, including key cycling routes either identified by the *Local Cycling and Walking Infrastructure Plan* (LCWIP), or existing routes, such as the Ebury Way. This would help ensure that new residents in the area have viable alternative options to using cars for travel within Watford so that new car trips are minimised.

The Town Centre Action 5a: Develop the business case and a longer-term project to create a sustainable transport corridor between the High Street and Bushey Station.

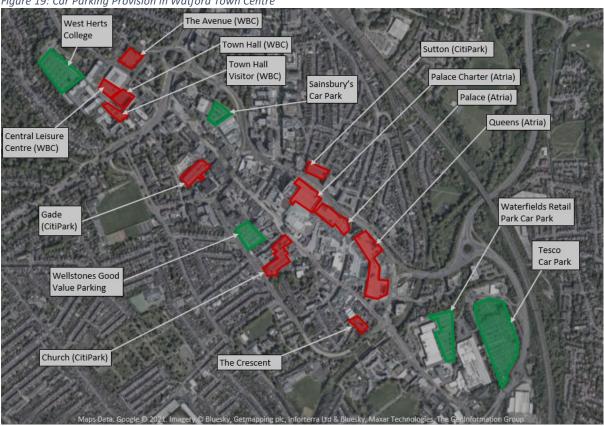
Town Centre Action 6: Car Parks

The availability and cost of car parking is a key factor in influencing people's decisions on whether to drive a journey or choose an alternative mode. Off-street car parking provision in Watford is extensive, with around 5,000 publicly accessible spaces available, in addition to private car parking provided by businesses for employees or other uses. This volume of car parking occupies a significant amount of land within the town centre, as illustrated in Figure 19.



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Figure 19: Car Parking Provision in Watford Town Centre



This provision of car parking would appear to be higher than many urban areas around the country, with a ratio of around 44 town-centre spaces per 1,000 people in the borough being double many other places, for example, Lincoln has only 22 spaces per 1,000 people. This high availability of spaces encourages people to drive into the town centre, rather than use other modes, contributing to overall congestion. To gain a full picture of the extent to which supply is matched to demand, detailed surveys of car park usage are required. These could inform the development of a car parking strategy.

Longer journeys Action 6a: Survey and analyse usage of town centre car parks when travel behaviour has returned to closer to 'normal' post pandemic to understand extent supply is matched to demand and develop a car parking strategy.

The pricing structure of off-street car parking is a key element of their management. It can be used to influence travel behaviour, influencing both travel times and length of stay. There is little in the way of numerical evidence, as opposed to anecdotal, to suggest that car parking charges directly affect town-centre footfall. In general, visitors are more likely to make decisions on whether to visit based upon the ease of finding a space, and congestion on arrival/departure, with pricing structures more likely to affect the timing and length of visits⁵¹. Currently, council-run car parks are generally slightly cheaper than public car parks, with relatively flat pricing rates across the day. The level of car parking charges should be reviewed as part of a longer-term parking strategy, alongside the implementation of schemes to make it easier to travel to the town centre by sustainable modes. An example is if a Park and Ride scheme is developed, an increase in long-stay parking charges in the town centre will help encourage people to use the new Park and Ride site, rather than driving into the town centre to park.





Longer Journeys Action 6b: Review car parking charges, and work with key stakeholders to establish a town-centre pricing strategy that is integrated with the wider needs of a sustainable transport network.

The way that car parks are used will need to adapt with the changes to the overall transport network. This has already been seen with the installation of electric vehicle charging infrastructure in many of the car parks managed by the council, as well as car club vehicles in the Town Hall and Avenue Car Parks. The requirement for such uses will increase as the number of electric vehicles grows, accompanied by the aim of a new car club. This aligns with providing electric vehicle charging at people's destinations, rather than at their homes. These are not the only potential uses of space within car parks; underutilised spaces could be converted to, for example, cycle parking or bike share bays.

Longer Journeys Action 6c: Consider utilising car parking spaces to encourage greener travel options, increasing provision of electric vehicle charging, as well as incorporating car club spaces, cycle parking or bike share bays as appropriate.

The supply of off-street car parking in Watford is extensive for a town of its size, and some car parks within the borough are rarely fully occupied. An oversupply of parking will encourage unnecessary car trips, as well as being an unproductive use of land, which is often of high value, and could be put to more beneficial uses. This strategy aims to make it easier to travel to the town centre by non-car means and once this is the case, the demand for car parking should reduce. It is recommended that car park operators and the council continue to monitor the level of supply available, and where appropriate, reduce this to match demand, repurposing the available space for other valuable uses.

Longer Journeys Action 6d: Review car parking supply against demand, and ensure that this is optimal for a town with a sustainable transport network.

Krystyna's travel story

Professional working on Clarendon Road in the town centre



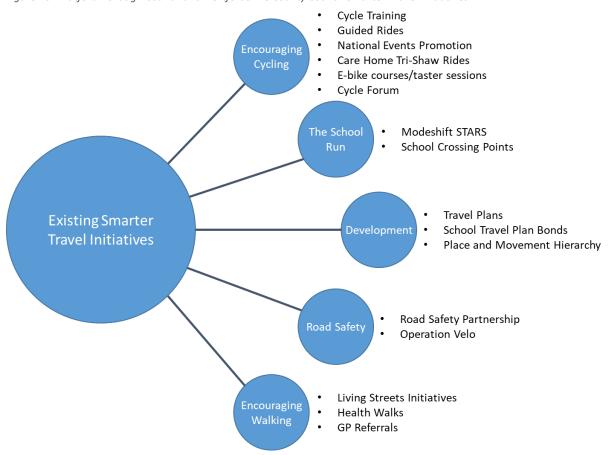


Supporting Change

To make sure the schemes that are developed meet the objectives of this strategy, it will be important to involve and engage with the local community as much as possible to help shape their design. Similarly, once measures are implemented, it will be important that people know about them and understand how they can use them. Given the importance of this strategy to the future of Watford, it is reasonable to expect that, where applicable, people are rewarded for changing their travel behaviour to become more sustainable.

Over the next thirty years, significant new residential and commercial development will take place. New development in Watford will need to align with the goals of this strategy, so that new residents, employees and visitors are encouraged to travel in a sustainable manner from the start. Both Watford Borough Council and Hertfordshire County Council already have many initiatives to encourage people to adopt more sustainable modes, which are summarised in Figure 20. These will be continued, integrated and aligned with the schemes being proposed within this strategy.

Figure 20: Watford Borough Council and Hertfordshire County Council Smarter Travel Initiatives



Supporting Change Action 1: Community Engagement

At the heart of successful transport projects is successful engagement with the local community, ensuring it is involved from the outset. This is already an approach that is endorsed and adopted by both Hertfordshire County Council and Watford Borough Council. The nature of such engagement will vary between schemes and measures, but will follow key principles throughout. These will include:

- Involving the community from the outset, and throughout the design process
- Speaking to as wide a cross-section of people as possible



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- Involving people in the design of schemes
- Gaining feedback on schemes once delivered, and modifying accordingly

It should be clear that whilst engagement will be at the heart of the implementation of this strategy, transport and mode choice within Watford has to change in light of the Climate Change Emergency. Engagement will be on how to make transport more sustainable, but not whether such an approach is pursued. The scientific evidence and national, regional and local policy are all unanimous in the need for the way people travel in the UK to change significantly.

Supporting Change Action 1a: Active community engagement and consultation in choosing, designing and implementing the actions set out within this strategy.

Supporting Change Action 2: Rewarding Change

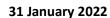
A key part of successful initiatives to change how people behave is rewarding those who make changes. This appeals to human nature and can help overcome initial barriers or fears of losing out, particularly for early adopters. Rewarding those who travel sustainably helps set the expectation that this is the preferred mode of travel for people moving around Watford. To reward individual travel choices, smartphone apps can be used to encourage active and sustainable travel behaviour.

The Watford app already shows the difference in travel modes with respect to carbon emissions and calories expended, but opportunities exist to add more tangible rewards. There is future potential to use tracking features in such an app, if users elect to use them, for example, people can score points for choosing sustainable travel modes instead of driving journeys. These points can then contribute to leader boards with virtual medals and prize draws to provide an element of gamification to people's day-to-day travel, as well as offering the opportunity to collect physical rewards. Points collected over time can be exchanged for items in local participating businesses, for example a coffee in a café, or be spent online with local retailers, or transformed into donations to local charities. This not only provides encouragement for local people to travel more sustainably through rewarding such behaviour, it offers opportunity for local business to participate in and endorse the Watford Borough Council's encouragement of sustainable transport, with the benefit of raised profile, particularly for businesses targeting a sustainable model themselves.

Supporting Change Action 2a: Develop a reward system for people who choose sustainable travel options, with links to local businesses.

Reducing the number of cars in a household will play a major role in moving its members towards more sustainable travel. People living in non-car owning households in London are between two and three times more likely to travel actively for thirty minutes on a given day than people in multi-car owning households ⁵². However, for many people, giving up a car is a major decision, with understandable concerns around the practicalities of living without, or with fewer cars. One way to help people overcome this initial step is to provide a reward for giving up a car. This can take the form of a 'mobility credit' given to individuals who scrap their cars. The 'mobility credits' can then be used on public transport or other sustainable modes, such as bike share, or car clubs. They could also be linked to the purchase of a new cycle, including electric or cargo bikes.

Supporting Change Action 2b: Investigate a system of mobility credits in the form of grants given to individuals who give up their cars, to be spent on sustainable travel.





Supporting Change Action 3: Working with Businesses

Travelling to and from work, plus trips made whilst working, made up just under a third of all trips by households in Watford pre-COVID. Most of these trips are made by car. Workplaces and employers can play a large role in determining how their employees commute to work and make business trips. Workplace Travel Planning can play an effective role in encouraging more sustainable work travel, through developing a package of measures and actions to this effect. Where employed successfully, these can not only lead to greener travel, but wider businesses benefits, such as reduced costs related to travel, healthier and happier employees, plus a more sustainable image for potential customers. Workplace Travel Plans need to be bespoke to each organisation and require significant commitment from employers for them to be successful. Whilst they will be a *Local Plan* requirement for major new developments, they can be adopted by existing businesses.

Over 50% of trips to work and over 70% of work related trips in Watford are made by car4

The move towards a blended mix of home and office working as a result of the pandemic presents an opportunity to relook at working with businesses to reduce travel by car. Watford is home to several large employers, and working with these on developing ambitious Workplace Travel Plans could help switch a large number of trips to more sustainable means, helping businesses take advantage of the actions of this strategy, many of which could benefit businesses as equally as residents.

Supporting Change Action 3a: Engage with businesses to support the development of ambitious Workplace Travel Plans, targeting a shift to more sustainable travel behaviour.

As well as businesses creating the need for people to commute and undertake work-related trips, many businesses are reliant in some manner on the movement of goods. However, awareness of, and planning for, such freight movements may not always be fully integrated into wider transport planning, despite the potentially pivotal role it could play both to businesses functioning and wider quality of life in Watford. The adoption of a 'think freight' approach to all aspects of transport planning, plus the development of a Freight Quality Partnership or Freight Forum would create an entity to begin this process and aid with ongoing efforts to gather local insights and help deploy local measures. This could combine views from Watford Borough Council, Hertfordshire County Council, key anchor institutions, local industry partners and local businesses to develop and support best practice for the management of the impact of movement of freight on the transport network.

Supporting Change Action 3b: Establish a Freight Forum to develop and push best practice relating to sustainable freight and logistics practices.

Supporting Change Action 4: Sustainable New Development

The Local Plan seeks to deliver just under 15,000 new homes by 2036, alongside an 11% increase in jobs in Watford. Making sure that these new residents and workers travel sustainably as much as possible from the start will be a key part of this strategy, to embed new sustainable travel from their first days in Watford, rather than seeking to change travel patterns some time post occupation. The design and planning of new development can play a huge role in determining the travel behaviour of its occupiers.

Key principles for ensuring that new development encourages sustainable travel are set out within the *Local Plan*. These include limiting the provision of car parking, particularly in developments in or close to the town centre; prioritising high-quality cycle and walking access to sites; safeguarding land for



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future sustainable travel; and managing the impacts of new development through Travel Assessments and Travel Plans.

The three Strategic Development Areas identified within the *Local Plan*, Watford Gateway, Colne Valley and the Town Centre, will be the main areas for future growth. This has been taken into account in the development of the overall strategy, with many measures focused in these areas. This will ensure that new development is served by the appropriate sustainable transport infrastructure.

Supporting Change Action 4a: Ensure that new developments prioritise sustainable transport and that sustainable transport measures align with the needs and locations of new developments.

A key tool of the planning process is the Travel Plan, setting out how a new development will enable its users to travel sustainably, and subsequently monitor the extent to which this occurs. Travel Plans are required by the *Local Plan* and Hertfordshire County Council at the outset of new developments. Their success is dependent on being effectively monitored and enforced, secured via Section 106 agreements. Travel Plan Bonds, as currently used for schools in Hertfordshire, allow fees to be held from developers, to be returned in instalments on successful delivery of measures and achievements of targets set out within the Travel Plan. A wider use of such bonds on other large development types could help ensure that the intended outcomes are delivered at such developments.

Where multiple developments are planned in a single area, Area Travel Plans can be effective in providing a framework for bringing forward strategic-level measures that are relevant to the area, and build public support for sustainable travel. Shared mobility options, such as hire bikes, car clubs and travel hubs/information points may receive greater demand if positioned in communal areas. New Area Travel Plans in Watford could be targeted in places with significant levels of planned growth, most likely within the Strategic Development Areas set out in the *Local Plan*.

Larger business premises, and retail sites will benefit from Delivery and Service Planning Toolkits being secured and delivered through planning conditions, to engage with businesses and establish processes around loading, parking, and waste/recycling collection, to minimise the impact these have on local highway network.

Supporting Change Action 4b: Make full use of planning conditions to facilitate sustainable travel, including wider use of Travel Plan Bonds, adoption of Area Travel Plans for areas of multiple developments, and Delivery and Service Planning Toolkits for larger businesses.

Supporting Change Action 5: Communications, Messaging and Training *Communications*

It is important that the local community are engaged in a sustainable transport scheme development and that all those who could benefit from each scheme are aware of the scheme's existence, the benefits to them of using it, and if necessary, provided the relevant information or training required to do so.

To do this for new transport initiatives, they will need to be accompanied by clear information, before and during their launch and, as they start to have an impact, expand or change. Incorporating appropriate resource and budget allocation for communicating and marketing new measures should therefore be standard practice. This should not just provide information on the initiative, but be carefully thought out to encourage people to use them, paying attention to key lessons of successful messaging around behaviour change, both in transport and other walks of life, including ⁵³:



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- Demonstrating how change is possible for individuals
- Overcoming fear of social exclusion through providing evidence or examples of other similar people making the same changes
- Incentivising change through rewards for those who trial alternatives
- Making use of people's desire not to miss out on opportunities they can gain from
- Making change as easy as possible so it is seen as the default option
- Appealing to people's emotions, as well as providing rational reasons to change
- Setting expectations that change is expected, not just an option for some
- Showing the tangible impacts of change at a personal and community level, via case studies, preferably through real-life images, or events

The communication of active travel benefits could be aided by the support of health professionals. Health practitioners can prescribe walking and cycling to patients to help increase awareness of the benefits of exercise for physical and mental health, an approach encouraged and piloted by the Department for Transport. This could be supported by access to active travel schemes for patients, for example, credits for use on the bike share scheme.

Supporting Change Action 5a: Ensure that appropriate, well thought-out, clear information is produced to support all actions of this strategy, providing the nudge or motivation people need to change their behaviour. Work with health professionals to support and prescribe active travel.

The range of schemes being developed by Watford Borough Council and Hertfordshire County Council over the course of the strategy period will be extensive and will thus require a clear communications plan to ensure they are understood by those who could benefit from them, the wider community and stakeholders in a way that will avoid confusion or information overload. A plan setting out the various schemes and how they link together and contribute to the overall strategy will be prepared and regularly updated, with a focus on providing a consistent message. In all engagement, Watford Borough Council and Hertfordshire County Council will work closely together to ensure alignment between the various schemes.

Supporting Change Action 5b: Develop and maintain a joint Watford Borough Council/Hertfordshire County Council transport communication plan, and a consistent approach to communication, engagement and consultation that links all new transport measures to the wider strategy.

Watford Borough Council currently organises and hosts a Cycle Forum, offering interested residents an opportunity to hear the latest plans for cycling, as well as providing feedback on the changes they would like to see in the borough. This has been successfully used in the development of the Local Cycling and Walking Infrastructure Plan, allowing participation in the development of the schemes that are found within that plan. The Cycle Forum will be continued, whilst recognising that the views and needs of people walking are under-represented, given the volume of trips undertaken by walking. An approach will therefore be considered that would allow residents to engage in the same manner around walking in the borough.

Supporting Change Action 5c: Maintain the cycle forum, and seek to create an equivalent opportunity for engagement and communication on walking.

Training

Watford Borough Council and Hertfordshire County Council already deliver extensive training and support activities to encourage sustainable travel, including cycle training, guided rides and health



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walks. Significant activity is focused around the Watford Cycle Hub, which, as well as providing training courses and guided rides, offers cycle hire, bike maintenance, and reconditioned cycles for sale. This includes targeting groups where cycle levels are low, such as women, minority groups and the elderly. For example, a recently launched initiative provides trishaw rides to the elderly to help increase local activity levels. Such activities are crucial in enabling people to start cycling, particularly amongst communities or groups of people who wouldn't naturally picture themselves as people who cycle. Continuing such activities to support the increasing provision of cycle infrastructure in the borough will be crucial to help ensure as many residents as possible take advantages of the new opportunities for cycling. This will include encouraging training and 'tester' activities for under-represented groups, using cycles. Such activity could be expanded through close coordination between Watford Borough Council and Hertfordshire County Council, as well as external partners, such as British Cycling and Cycling UK. The identification of local champions could be developed and encouragement of the use of the bike share scheme should be a central feature. Similar benefits can be brought through partnership with walking groups, such as Living Streets.

Supporting Change Action 5d: Maintain and seek opportunities to expand training and other activities designed to encourage people to walk or cycle.

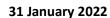
Supporting Change Action 6: Sustainable School Travel

The school run offers a great opportunity not only to embrace active travel, with most pupils living within walking or cycling distance of school, but to embed sustainable travel behaviour at an early age and embrace the power of children to influence their parents' behaviour. School travel planning via the national scheme, Modeshift STARS, is a proven approach to encourage their pupils to travel to and from school by sustainable means. Through this scheme schools can achieve accreditation, with different levels recognising how much the schools have demonstrated best practice in supporting cycling, walking, scooting and other forms of sustainable and active travel on the journey to/from school. At the point of publication of this strategy only three schools in Watford, out of 42 primary and 11 secondary schools, have an accredited travel plan. Encouraging more schools to engage with Modeshift STARS and work towards accreditation should help encourage greener travel for school trips. In addition, requiring a school travel plan should be a planning condition of all new or expanded schools in Watford. Through the Modeshift STARs process a wide range of initiatives can be implemented, listed below:

- School Crossing Patrols
- Road safety training and education
- Safer Routes To School Scheme (including physical infrastructure improvements)
- The School Walk initiative
- Cycle training
- Active travel and road safety campaigns, and
- School Streets

Appropriate measures can be pursued for participating schools to enable children to travel to school by more sustainable means.

Supporting Change Action 6a: Engage with schools to encourage them to develop accredited Modeshift STARS travel plans. Ensure the planning process identifies all new or expanding schools and secures the development of an accredited school travel plan.





Moving Goods

The movement of freight is a fundamental part of the transport network in Watford. The impact of the COVID-19 pandemic has accelerated the growth in online shopping and home deliveries, which are primarily delivered to customers by Light Goods Vehicles (LGVs), with new registrations of these vehicles having grown by 30% from 2010–2020 across the UK, compared to a 13% growth in all vehicles across the same period ⁵⁴. The result of this is an increase in vehicles and vehicle miles, thus contributing to congestion, air pollution and the other negative impacts of motor vehicles.

Internet sales in the UK have risen from 7% to 28% of total retail sales from 2010 to 2020²⁴

Bulkier and larger volumes of goods must be delivered to warehouses, shops, building sites and other businesses that primarily use Heavy Goods Vehicles (HGVs). These are longer, wider and heavier than most other vehicles on the road, causing noise, air-quality and safety issues. Ensuring the best-possible management of the movement of freight will therefore be a key part in creating a more sustainable transport network and improved local environment in Watford.

Moving Goods Action 1: Green Delivery Modes

At present the vast majority of deliveries in Watford will be made by petrol or diesel-driven LGVs. However, alternatives exist to encourage these to be made by other means, particularly for the last mile of journeys. Electric cargo bikes offer the potential to complete many delivery trips for a range of businesses, as well as helping residents move bulky items without the need for a car or van. Larger providers, such as logistics companies and major supermarket chains, have both seen opportunities for switching to cargo bikes from conventional delivery methods. At a local scale, providing the opportunity for small businesses to make deliveries via cargo bike, or for tradesmen to visit customers, both offer potential economic and sustainability benefits. These include minimal running costs, ease of parking, absence of parking charges, and journey-time advantages due to bikes being able to bypass congestion. E-cargo bikes can also play a key role in providing an alternative to car ownership for residents through providing for the type of trips that may previously have necessitated a car.

The key barriers to entry with respect to switching to use of a cargo bike are the initial cost of the bike, and lack of confidence in, or knowledge of, its use and benefits. Providing the option to trial bikes before buying can help to alleviate this concern, and can be implemented for both residents and businesses. The Watford Cycle Hub in Holywell would be an obvious location for such a scheme. Larger volume usage could be encouraged through supporting the establishment of an e-cargo bike logistics company within Watford.

Facilitating the use of cargo bikes will require appropriate infrastructure. In addition to providing the type of high-quality cycle routes described in the Active Travel Section, cargo bikes require the removal of barriers often found on routes that may permit standard cycles, but are too narrow for cargo bikes. Suitable parking for cargo bikes differs from standard cycles, with a need for more space and options against which to secure the cargo bike.

Moving Goods Action 1a: Develop a system to allow residents and businesses to trial use of e-cargo bikes and investigate the provision of a cargo-bike logistics provider in Watford. Ensure cycle facilities are appropriate for use by cargo bikes.

Moving Goods Action 2: Freight Consolidation

Freight consolidation involves goods first being delivered to a single hub location, before being grouped together in smaller vehicles for the final stage of delivery. Consolidation can help trips and



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routes be better coordinated, reduce overall trip volumes, and provide more options for transferring goods from larger, more polluting HGVs and LGVs, to zero-emission vehicles, including electric vans and e-cargo bikes. A freight-consolidation scheme outside Bristol led to a 70% to 80% reduction in the number of onward trips, meaning that for every ten vehicles that made a delivery to the consolidation centre, just two or three onward journeys to the central Bristol area were made⁵⁵. A consolidation centre could help offset the identified current issue relating to overnight parking of HGVs in North Watford, whilst also offering high-quality welfare facilities for drivers.

Whilst in the long term, consolidation can save businesses money through increased efficiencies, the initial set-up costs are high and risk is created through creating an additional step in the supply chain. Consolidation could be based around either:

- Working with established industry partners (couriers) with consolidation/delivery/service centres, such as UPS and Royal Mail or
- Developing a shared-access consolidation facility that all third-party logistics providers, can feed into

In both cases such consolidation would be with the expectation that the final part of the journey would be completed by either electric vans or e-cargo bikes. The location of any consolidation centre would need to combine both easy access from the strategic road network, as well as direct links to the town centre, and active travel infrastructure. Potential suitable locations could include the Greycaine or Colonial Way Industrial Estates, which are close to 'A' roads, as well as the future key Local Cycling and Walking Infrastructure Plan route along St Albans Road.

Origin

Suppliers

Direct

Consolidation Centre
Consolidation and storage facility

Micro consolidation
point or mobility station

Regional
distribution
centre
centre
eg. recycling

Figure 21: Freight Consolidation 56

Moving Goods Action 2a: Investigate options for freight consolidation centres to shift last-mile deliveries to electric vehicles or e-cargo bikes.

Moving Goods Action 3: Managing Freight Movement and Loading Freight Movements

The movement of freight, particularly that of HGVs, puts pressure on the road network, and contributes to local air pollution and congestion. There are some areas of Watford that experience high HGV or LGV movements and parking on roads that are not suitable for such large vehicles, which



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causes a safety hazard for other road users, creates noise and air pollution, reduces available parking or encourages pavement parking, and damages carriageway surfaces.

A local routing plan could help keep larger vehicles on the main roads in Watford, especially if accompanied by a ban on 7.5-tonne vehicles accessing residential areas, an increase on the current 5-tonne ban on residential streets. Such an approach should be supported by the installation of Variable Message Signs at key intersections on approaches to the town, providing guidance on routing, warnings of congestion, instructions for construction site traffic, and highlighting weight and height restrictions.

Moving Goods Action 3a: Investigate options for managing freight routing, including a local routing plan, ban on 7.5-tonne vehicles in certain areas, lorry park and use of Variable Message Signs.

Loading

Road space on the High Street, St Albans Road and many local centres is limited, with conflict between parking, loading, bus movements, active travel and general traffic. This can affect businesses' ability to receive deliveries, as well as causing vehicles to circulate while looking for a space, park on footways or leave engines idling. Dynamic kerbside management offers an approach to use smart technology to optimise how the kerb space is managed. By using occupancy sensors in bays connected to an app or other digital means, users can check space availability and reserve spaces, whilst the council could implement charging strategies that are flexible according to the time of day and location of space, to prioritise the needs of different users accordingly. Such an approach would be a significant investment, and would need to be supplemented by local engagement with residents and businesses and the establishment and involvement of a freight forum.

Moving Goods Action 3b: Investigate options for dynamic kerbside management in the town centre and along St Albans Road.

Selassie's travel story

Small independent business owner

Currently...

- Selassie owns a bakery which makes and sells food for events such as birthdays and weddings
- The company posts the products using a commercial courier which costs the customer around £4.00 per order and can take several days to ship, even when the customer lives in Watford
- While the road outside his shop isn't particularly busy, the delivery vans for local businesses sometimes turn up at the same time, and suppliers have passed on fines received after they have blocked accesses in the past
- He would like to offer a small-scale café service from his site but there is no space for people to wait or sit inside or outside the shop



In the future...

- With a grant from the Council, Selassie has been able to purchase an
 electric cargo bike for his staff to use. This allows local customers to have
 products delivered much quicker, including on the same day, for the same
 price per order
- A new active kerbside management system has been put in place by the Council, meaning each business can book and guarantee loading space for their delivery vehicles each day
- He still uses vans for most of his orders. His deliveries are rarely late now, which his drivers think is because the roads are quieter than they used to be due to people using other ways of getting about
- Having less deliveries made by van, he has agreed with the neighbouring businesses to turn one of the parking spaces outside the shop into a parklet, and provided tables and chairs for people to sit at. His business has now become a popular place to have coffee in the neighbourhood

Services offered at his shop:

Bakery items delivered by cargo-bike and van Café Seating area and bicycle parking



Moving Goods Action 4: Utilising Interchange Hubs for Parcel Delivery

The existing and proposed interchange hubs in the borough, particularly Watford Junction, have high numbers of people visiting them. Therefore, if parcel lockers are installed in these locations, they offer the potential to reduce the need for deliveries to go to people's homes, by dropping off at parcel lockers based within the hubs instead, similar to those already in place at many locations in the borough. Doing so would reduce the number of trips driven and mileage required for LGVs, whilst providing a convenient and safe way for residents to pick up parcels, especially if they know they will not be at home. To be successful, engagement and promotion would be required to advertise the benefits to both logistics companies and residents.

Moving Goods Action 4a: Install parcel lockers at existing and future transport hubs.

Moving Goods Action 5: Managing Construction

Construction sites can have a significant impact on the transport network, relating to the movement of predominately HGV construction vehicles, and the potential need for sites to take space from the highway during construction. With new developments planned across the borough over the coming years, particularly in the Watford Gateway and Colne Valley areas, managing the impact of the related construction will be important to maintaining the functionality of the transport network and avoid additional congestion. Construction Management Plans utilise the planning process to set conditions for developers to offset and manage the impact of site supply-chain activity on the road network for vehicles travelling to and from sites from outside the borough. The planning process should be used to manage any space taken from the highway, ensuring the impact to people walking and cycling is minimised by providing practical, fully accessible routes that do not require significant diversion or safety risk. This may require limitations on HGV movements at peak times. The requirement for Construction Management Plans is set out within the *Local Plan* and should be enforced to prioritise minimising the impact on active travel.

Moving Goods Action 5a: Use Construction Management Plans to minimise the impact of construction on the transport network, particularly its impact on active travel.





Watford Borough Council and Hertfordshire County Council Commitments

Equality

Watford Borough Council and Hertfordshire County Council are committed to complying with all the requirements of the Equalities Act 2010, championing equality and embracing diversity in all council services. This strategy provides the opportunity to significantly improve the quality of life for those with a disability and our minority communities. Many of the actions specifically target improving access to different modes of transport, whilst the over-riding impact of moving to a more sustainable transport network will be creating a system that is fairer, by reducing inequalities in people's ability to move around the borough. It understood that individual schemes will have varying impacts on different groups of society and these will have to be carefully managed in delivering this strategy. The strategy itself has undergone an Equality Impact Assessment, and both Watford Borough Council and Hertfordshire County Council commit to ensuring that Equality Impact Assessments will be used as an active tool in the development of all schemes to ensure that schemes are delivered in a way that maximises opportunity to remove barriers to equality.

Collaboration

As set out in the Supporting Change section both Watford Borough Council and Hertfordshire County Council are committed to engaging and collaborating with the local community in the delivery of the schemes within this strategy. They will endeavour to hear from the widest possible range of views in developing new projects. This collaboration will extend to those outside of Watford, both neighbouring authorities and their local communities, recognising that many of the schemes within this strategy will have impacts outside Watford's boundaries. Where possible projects will be developed collaboratively with appropriate organisations, including, but not limited to, Local Authorities, transport operators, businesses, and community groups.

Setting an Example

It is understood that if Watford Borough Council and Hertfordshire County Council are to expect people to travel differently in Watford, both councils should be doing the same. Both organisations have already enabled reduced travel by making hybrid or home working standard in all roles where it is possible. Watford Borough Council have promoted the use by staff of both the bike-and car clubs schemes. The *Sustainable Hertfordshire Strategy* sets out how Hertfordshire County Council aims to reduce its carbon emission related to transport through measures such as moving its own fleet to zero emission vehicles and using travel planning to enable staff to use sustainable modes for travel to and from work.





Programme and Funding

Programme

The actions set out above form a long-term programme for the next 20 years and beyond. They vary in scale and level of likely impact, as well as cost and time required to implement. The scale of change required means that, in the long term, many streets in Watford will need to work differently to how they do today, and this will impact how easy it is to drive a private car around the borough. However, by providing practical alternatives to driving, private cars will become a less attractive option for travel and, in time, the last resort for the majority of trips. It should be noted that younger generations are already choosing not to own or drive cars in major urban conurbations. The programme has been designed to provide a step-by-step approach to changing travelling behaviour and transport infrastructure, with each step building on the previous. Watford Borough Council and Hertfordshire County Council have developed a delivery plan covering the actions required in the short term to progress each action, irrespective of their ultimate delivery timescale.

Stage 1: Making Sustainable Travel Easier (ongoing)

The first stage of the programme is already underway via the schemes being implemented by Watford Borough Council, notably the car club, bike share, on-demand bus, travel app, and recent urban realm improvements, as well as being supported by existing policy, particularly the new *Local Plan*. This stage will be developed further, to provide more alternatives to car ownership and encouraging greater take-up of sustainable travel. Notable features will include:

- A new, larger car club
- Continuing to install new bike share bays
- Expanding provision of electric vehicle charging
- Developing rewards for sustainable travel, and providing training opportunities
- Engagement with residents, businesses and developers to encourage sustainable travel, particularly with opportunities to shape post-COVID commuting behaviour

Stage 2a: Enabling Active Short Trips (from now)

The greatest potential for change identified in the strategy is around short trips and their ability to be completed by walking, cycling or other active modes. It will therefore be a priority to accelerate the changes that will mean that the town provides an environment where people feel comfortable travelling by active modes. This will mean aiming to start delivery of the actions within the Active Travel theme, particularly the provision of sections of new cycle routes and better footways and pedestrian crossings, including around the town centre. It will mean starting to change the thinking about streets in Watford by implementing measures to reduce traffic and make better use of kerb space in some locations.

Stage 2b: Improving Public Transport (from now)

Alongside the focus on active travel, there are areas where simple improvements can be made to improve public transport through implementing bus priority measures, improving bus stops and access to rail stations will form the main part of this, delivering the enhancements identified in the Longer Journeys theme. There will be a continuation of work with taxi drivers to enhance the taxi fleet.

Stage 3: Reprioritising Space (from five years' time)

With Stages 1 and 2 well underway, residents and businesses will increasingly benefit from a range of alternatives to private cars. Continuing to advance will require progressive reallocation of more space

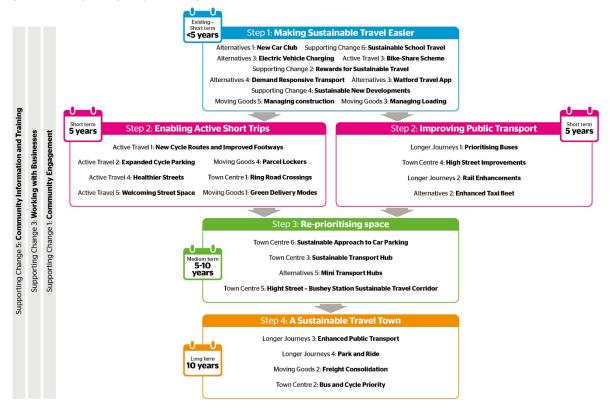
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to sustainable travel. This will mean delivering transformational new walking and cycling schemes, such as extended segregated cycle routes, or entirely new crossings of major roads. Similarly, buses will need the same level of commitment, with increasing priority offered, especially around the town centre. With the focus on sustainable travel, consideration will be needed to ensure that the use of town centre land, especially car parking, is appropriate and aligned with the objectives of the strategy.

Stage 4: A Sustainable Travel Town (from ten years' time)

The largest schemes in this strategy will take a long time to develop, fund and implement. These include new public transport provision; Park and Ride (if the business case is substantiated); major freight consolidation; large-scale sustainable transport hubs with fully accessible stations; and new passenger transport systems, such as HERT. In completing such schemes, travel in and out of the borough will become as sustainable as that within it, meaning Watford will truly live up to the title of a sustainable travel town.

Figure 22: Transforming Watford in Stages



Funding

This strategy is ambitious, and if delivered in full, will deliver a step-change in how people and goods move around Watford. Both Watford Borough Council and Hertfordshire County Council have a clear commitment to moving to a more sustainable transport network and will support the delivery of the strategy through the use of available council funds, and drawing on developer funding through the Community Infrastructure Levy and Section 106 contributions. However, it is clear that the cost of implementing the strategy will be high, and beyond the reach of Watford Borough Council, Hertfordshire County Council and developers alone. The strategy will therefore be dependent on securing external funding and its existence will in itself put the councils in a stronger position to bid for funds from the Department for Transport, Local Enterprise Partnership and other national bidding opportunities. Both councils have an existing record in successfully bidding for funding, including from



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the Department for Transport's Active Travel Fund, Office for Low Emission Vehicles, and Local Growth Fund, amongst others, in recent years. This approach will be continued with elements or packages of the strategy chosen for bids that best fit future funding opportunities, with Watford Borough Council and Hertfordshire County Council working in close partnership to submit these. They will work together to take forward the actions, developing suitable schemes, undertaking feasibility work, preparing business cases and, most importantly, engaging with residents and businesses to design and develop proposals.

Watford Borough Council will seek to find commercial partners and private investment to support the strategy, reflecting the potential benefits to business of sustainable travel, both in terms of more efficient, lower-cost travel and the association with greener practices.

To assist with determining priorities, all actions have been evaluated, using a consistent appraisal framework, to establish which will have the greatest impact on meeting the strategy objectives, whilst considering the complexity of delivery and expected cost, and a likely value for money can be derived by comparing potential impact to cost. This is summarised at Appendix B.

Mark's travel story

Retired electrician living in West Watford

Currently...

- Mark owns a car but only tends to use it for his weekly shops to the supermarket and seeing family who live in North Watford
- He's been warned by his doctor that he isn't doing enough regular physical activity which could lead to health issues later in life
- He would like to be more active but feels that the roads around his neighbourhood are unpleasant due to the amount of traffic on the roads
- He has also tried walking into town but found the journey frustrating due to how difficult it is to cross the ring road and narrow footpaths
- Despite having some family in Watford, he has limited contact with other people in his neighbourhood and can feel isolated at times

Typical level of physical activity per week: 30 minutes

In the future...

- Mark gets some of his shopping delivered to his house, and picks up a few items from the town centre when needed
- He now feels comfortable walking to the shops because safer crossings have been introduced across the ring road, and many of the footways have been widened
- He's started taking the on-demand bus service when seeing his family, as it is easier than driving and still stops directly outside his family's door
- Mark keeps his car so he can use it for days out with his grandkids, but generally uses it less frequently
- He now recognises people living in his area when out and about and often chats to his neighbours, using the new benches that have been added to the streets. He now feels part of the local community

Typical level of physical activity per week: 150 minutes Increase: 120 minutes





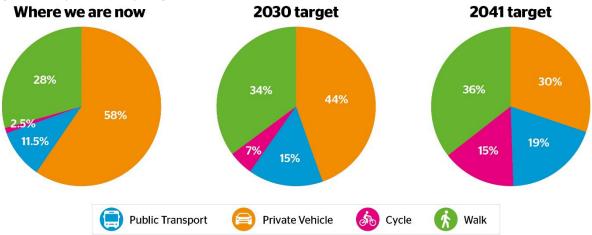
Targets and Monitoring

To understand whether the strategy is having the desired impact, and meeting the established objectives, it will be important to monitor its impact against key performance indicators.

Mode Shift Targets

At the heart of the strategy is an ambition to switch car trips to more sustainable modes. This aligns with the Department for Transport's aim for 50% of trips in urban areas to be made by active modes by 2030⁶. Watford, like almost all the UK, is far from this point at present, for example, 30% of trips in London were cycled or walked in 2018, with a further 36% made by public transport. Through analysis of the make-up of trips in Watford, and comparison against the level of change achieved in other areas, a set of targets has been developed for Watford to reach by 2041, with an interim target in 2030. These are set out in the figure below.

Figure 23: Watford Mode Shift Targets



Hertfordshire County Council conduct a travel survey every three years on how people within the borough (and county overall) travel. Therefore, this survey can be used to observe how mode shares are changing in Watford, with the current levels shown on the left of the pie charts above.

Wider Monitoring

Beyond mode shift, there are a range of other indicators that are already measured by either Watford Borough Council or Hertfordshire County Council that could be used to monitor progress of the strategy. These are shown in the figure below.

Figure 24: Table of Monitoring Indicators

Performance Indicator	Description	Sign of Success
Vehicle Kilometres	Estimate of the total number of kilometres driven each year by all vehicles on Watford's roads.	Decrease
Physical Activity	Proportion of people walking and cycling for travel at least three days a week.	Increase
Collision Data	Number of people killed or seriously injured on Watford's roads.	Decrease



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Performance Indicator	Description	Sign of Success				
Air Quality Management Areas	Number of Air Quality Management Areas.	Removal of existing and no new designation.				
Air Quality	Air pollution recorded at permanent sites across the borough.	Decrease in pollution levels.				
Walking and Cycling Monitoring Reports	New schemes to be accompanied by monitoring reports analysing pre- and post-installation data.	Reports completed for all schemes and demonstrate increase in active travel.				
S106 Agreements and Travel Plans	Use of S106 agreements on sustainable transport and travel plan targets.	S106 funds being used on sustainable transport and travel plan targets being met for new developments.				
Public Transport Accessibility	Travel times according to TRACC access tool.	Increase in areas within reasonable travel time by public transport.				
Equalities Impact Assessments	Equalities Impact Assessment to be completed for all new schemes.	Completion for 100% of schemes.				
Take up of New Modes	Surveying usage and customer satisfaction of new schemes, such as bike share or car club.	Increasing usage and high customer satisfaction.				

With the *County Travel Survey* being produced every three years, an impact evaluation report will be published at the same time to measure progress against all other indicators listed in the table above. An annual monitoring update will provide details on delivery of the actions.



WATFORD BOROUGH COUNCIL

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Appendix A: Consultation Report

See accompanying document, Appendix C: TTIW_Consultation Report.



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Appendix B: Action Appraisal

Action	Impact on Objective: Shift to Sustainable Modes	Impact on Objective: Providing for Future Journeys	Impact on Objective: Boosting Health and Wellbeing	Impact on Objective: Ensuring All Community Benefits	Impact on Objective: Making Best Use of Technology	Impact on Objective: Delivering a Great Customer Experience	Total Impact	Cost
Active Travel 1a: Cycle Network	High	High	High	High	Low	High	High	Medium
Active Travel 1b–d: Walking Improvements	High	High	High	High	Low	High	High	Medium
Active Travel 1e: Cycle and Walking Quick Wins	Medium	Low	Medium	Medium	Low	Medium	Low	Very Low
Active Travel 2a–c: Expanded Cycle Parking	Medium	Medium	Low	Medium	Low	Medium	Low	Very Low
Active Travel 3a–b: Bike Share	Medium	Medium	Low	Medium	Low	Medium	Low	Low
Active Travel 4a: Healthier Neighbourhoods	Medium	Low	High	Medium	Low	Medium	Medium	Medium
Active Travel 4b: School Streets	Medium	Low	High	Medium	Low	Medium	Medium	Medium
Active Travel 5a: Welcoming Street Space	Medium	Low	Medium	High	Low	Low	Medium	Very Low
Longer Journeys 1a: Bus Priority	High	Medium	Low	Medium	Low	High	High	High
Longer Journeys 1b: Bus Stops Improvements	Medium	Medium	Low	Medium	Low	Medium	Low	Low
Longer Journeys 2a: Rail Access Quick Wins	Medium	Medium	Low	Medium	Low	Medium	Low	Low
Longer Journeys 2b: Accessible Stations	Medium	Medium	Low	High	Low	Medium	Medium	Medium



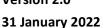
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Action	Impact on Objective: Shift to Sustainable Modes	Impact on Objective: Providing for Future Journeys	Impact on Objective: Boosting Health and Wellbeing	Impact on Objective: Ensuring All Community Benefits	Impact on Objective: Making Best Use of Technology	Impact on Objective: Delivering a Great Customer Experience	Total Impact	Cost
Longer Journeys 2c: Safe, comfortable stations	Medium	Medium	Low	Medium	Low	High	Medium	Low
Longer Journeys 2d: Abbey Line Improvements	Medium	Low	Low	Medium	Low	Medium	Low	Very High
Longer Journeys 2e–f: Watford Junction Improvements	Medium	High	Low	Medium	Low	High	High	Very High
Longer Journeys 3a-b: Enhanced Public Transport	High	High	High	High	Low	High	High	Very High
Longer Journeys 4a: Park and Ride	Medium	Low	Low	Low	Low	High	Medium	Very High
Alternatives to Car Ownership 1a: New Car Club	Medium	Medium	Low	Low	Medium	Medium	Low	Very Low
Alternatives to Car Ownership 2a–c: Enhanced Taxi Fleet	Medium	Medium	Low	High	Medium	Medium	Medium	Low
Alternatives to Car Ownership 3a: Electric vehicle Charging	Low	High	Low	Low	Medium	Low	Medium	Low
Alternatives to Car Ownership 4a: Demand Responsive Transport	High	Medium	Low	Medium	High	Medium	High	Very Low
Alternatives to Car Ownership 5a: Mobile Phone App	Medium	Medium	Low	Medium	High	High	High	Low
Alternatives to Car Ownership 6a: Mini Transport Hubs	Medium	Medium	Low	Medium	Medium	High	Medium	Low
Town Centre 1a: Improved Pedestrian and Cycle Crossings	Medium	Medium	High	Medium	Low	High	High	Medium
Town Centre 2a: Prioritising Cycling and Public Transport	High	High	Medium	Medium	Low	High	High	Very High



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Action	Impact on Objective: Shift to Sustainable Modes	Impact on Objective: Providing for Future Journeys	Impact on Objective: Boosting Health and Wellbeing	Impact on Objective: Ensuring All Community Benefits	Impact on Objective: Making Best Use of Technology	Impact on Objective: Delivering a Great Customer Experience	Total Impact	Cost
Town Centre 3a: Sustainable Transport Hub	High	High	Low	Low	Medium	High	High	High
Town Centre 4a: People Friendly High Street	Medium	Medium	High	Low	Low	Medium	Medium	Low
Town Centre 5a: Sustainable Transport Corridor	High	High	Medium	Low	Low	Medium	High	Very High
Town Centre 6a–c: Improved Car Parks	Medium	High	Low	Medium	Medium	Medium	Medium	Low
Supporting Change 2a–b: Rewarding Change	High	Medium	Low	Medium	High	Low	High	Low
Supporting Change 3a: Workplace Travel Plans	High	Low	Medium	Low	Low	Low	Low	Low
Supporting Change 6a: School Travel Plans	High	Low	Medium	High	Low	Low	Medium	Low
Moving Goods 1a: Green Delivery Modes	Low	Medium	Low	Low	High	Low	Medium	Low
Moving Goods 2a: Freight Consolidation	Low	High	Medium	Low	Medium	Medium	Medium	High
Moving Goods 3a-b: Freight Routing and Loading Management	Low	Low	Medium	Low	High	Low	Medium	Medium
Moving Goods 4a: Parcel Lockers	Low	Low	Low	Low	Medium	Medium	Low	Very Low
Moving Goods 5a: Managing Construction	Low	Low	Low	Low	Low	Low	Low	Low





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