

2016

Aylesbury Transport Strategy - Summary

This document has been produced as a summary outlining the main points of the Aylesbury Transport Strategy.



Introduction

This document represents a summary of the Aylesbury Transport Strategy (ATS) in order to get your views before its use in informing the Vale of Aylesbury Local Plan (VALP). The ATS is expected to provide a high level, guiding transport strategy for Aylesbury, to prioritise transport schemes for the area, and to promote a coordinated approach towards transport investment.

The following document describes:

- **context** of the strategy,
- **approach** taken to develop it,
- guiding **strategy objectives**
- existing and future **transport issues**
- proposed **transport improvements** to address the **transport issues**
- summary of current results from the **transport modelling** testing the highway improvements
- **plan for implementing** the strategy.

Context

The ATS has been developed in order to address existing transport issues and accommodate the future planned growth as outlined in the upcoming Vale of Aylesbury Local Plan (VALP). The strategy will be a plan for transport improvements in Aylesbury up to 2033. The VALP identifies Aylesbury as playing a substantial and critical role in delivering growth for the district and the rest of Buckinghamshire. It is identified as a potential new Garden Town and will be a focus for:

- Some 15,000 new market and affordable housing;
- New investment in economic activity and regeneration;

- New retail and employment development;
- Prioritising investment in multi-modal transport infrastructure; and
- Other new infrastructure, including health, education and community infrastructure, open space and recreation, and emergency and public services.

A number of policies have informed the ATS, including those at a local and national level. These include the aspirations of three key planning documents from Aylesbury Vale District Council (AVDC), the VALP, The Aylesbury Town Centre Improvement Plan and the Greater Aylesbury Garden Town bid.



Approach

The steps taken to develop the strategy up to this point include:

- A review of the policy context and existing and future conditions in Aylesbury;
- The development of a set of strategy objectives;
- A summary of the transport issues and opportunities;
- An initial workshop with internal/external stakeholders to agree the items above;
- The development of a set of transport improvements and assessment of their fit with the strategy objectives;
- The development of an implementation plan;
- A second workshop with internal/external stakeholders to seek their input to the transport improvements;
- The development of the draft strategy; and
- Public consultation.

The Strategy Objectives

A set of objectives for this strategy were formed based on a review of the overarching policies along with the existing transport issues in Aylesbury and input from stakeholders. The intention of the objectives is to guide the development of the strategy, including the assessment of the suitability of potential transport improvements.

The Transport Issues

Aylesbury is a focal point of Buckinghamshire's road network. The town is connected to the wider highway network via the A41, A418 and A413 and only the A4157 currently provides an internal semi-circular road around the north of the town.

Within the study area there is a population of approximately 129,000 inhabitants which has been rising over the last decade. There are approximately 62,000 jobs in the area, primarily concentrated in the town centre and along the A41 to the West. Private vehicles are the primary mode of transport within the study area and car ownership is high amongst residents.

Highway Network

There are high traffic and Heavy Goods Vehicle (HGV) flows on all strategic routes into and through Aylesbury town in both the morning and evening peak hours. Most congestion issues occur in Aylesbury town centre, and on strategic routes into and out of the town including the A413, A418 and A41. Junction delays are clustered in and around Aylesbury, most often at priority junctions with large flows on main roads. There are currently three Air Quality Management Areas within the study area, in zones where traffic flows are high or heavily used by HGVs.

A large amount of construction traffic is expected over the life of the strategy as the new HS2 route is implemented and housing developments proceed. Therefore the timing of any transport improvements needs to be carefully considered and staged with this in mind.

Within Aylesbury town, three sites have been identified by Road Safety officers of being of particular concern because of their road collision history, including the A418/ Bicester Road/ A413 junctions that make up the triple roundabout (Royal Bucks Hospital roundabout), the A41/Bicester Road/A4157 junction and the Bicester Road/Rabans Lane junction.



Public Transport

In terms of public transport, there are a number of rail stations that service the Aylesbury area, the most central being Aylesbury station near the town centre which is linked to the main bus station. Aylesbury Vale Parkway and Stoke Mandeville Station are also located close to the town but do not offer as many regular services to London. In the wider area, there are two stations most likely to be used by Aylesbury residents to reach London and the north; those residents living in the east of Aylesbury may also use Tring station and similarly those residents in the west of Aylesbury may travel to Haddenham station.



Bus services in the area around Aylesbury can be split into 3 distinct categories; regional buses, local buses, and community services. Generally bus services accessing Aylesbury town are high frequency, but can have unreliable journey times because of the congestion on some of the key roads in the peaks. Bus priority exists in some locations, but mostly in the town centre in the form of junction priority, slipways and bus lanes. A number of the key strategic radial routes have been designated for future bus priority lanes, known as Primary Public Transport Corridors (PPTC). There is currently only one PPTC in operation, on the A418 approaching Aylesbury from Stone/Oxford.

Regional buses serve the surrounding urban centres, with services being most frequent to High Wycombe. Aylesbury bus station has been identified by stakeholders as being at capacity and in need of improvement to accommodate the larger vehicles operators now use. Some bus stops have shelters and live journey time information, however this needs to be expanded to the wider network to encourage and facilitate bus travel.

Public transport does not have a high mode share for commuting purposes, with less than 10% of journeys to work made by bus or train as the main mode. However the public transport network in Aylesbury represents a significant opportunity to capture many more trips amongst both existing residents and employees and upcoming growth if more bus priority, a new or improved bus station, and improved bus and cycling/walking access to the rail stations is planned.



Cycling and Walking

Whilst there is already a well-established network of cycling paths known as the Gemstone Cycleway Network, cyclist movements in and around the town centre are relatively low, suggesting that existing cycling routes are not being used for the daily routine but more occasionally, perhaps only for leisure purposes.



Pedestrian movements are mainly concentrated in the retail core (south eastern part of the town centre), particularly at the western end of the High Street, where the main shopping attractions are located. Although the introduction of new crossings on Exchange Street and Friarage Road has improved pedestrian access, the Inner Ring Road (A41/A418) is still identified as a barrier, severing both pedestrian and cycling movements.

Flat topography and an already well established network of shared paths and cycle paths exist in Aylesbury, creating the opportunity for a far greater mode share of walking and cycling trips; add to this that many employment sites are within or close to the town centre, which provides relatively short distances to travel to services and main residential areas. However, current cycle routes are not continuous in places; particularly the links between radial routes and the quality of infrastructure varies along existing routes. If new shared path infrastructure is introduced, adequate planning for their maintenance should be included in the costs.

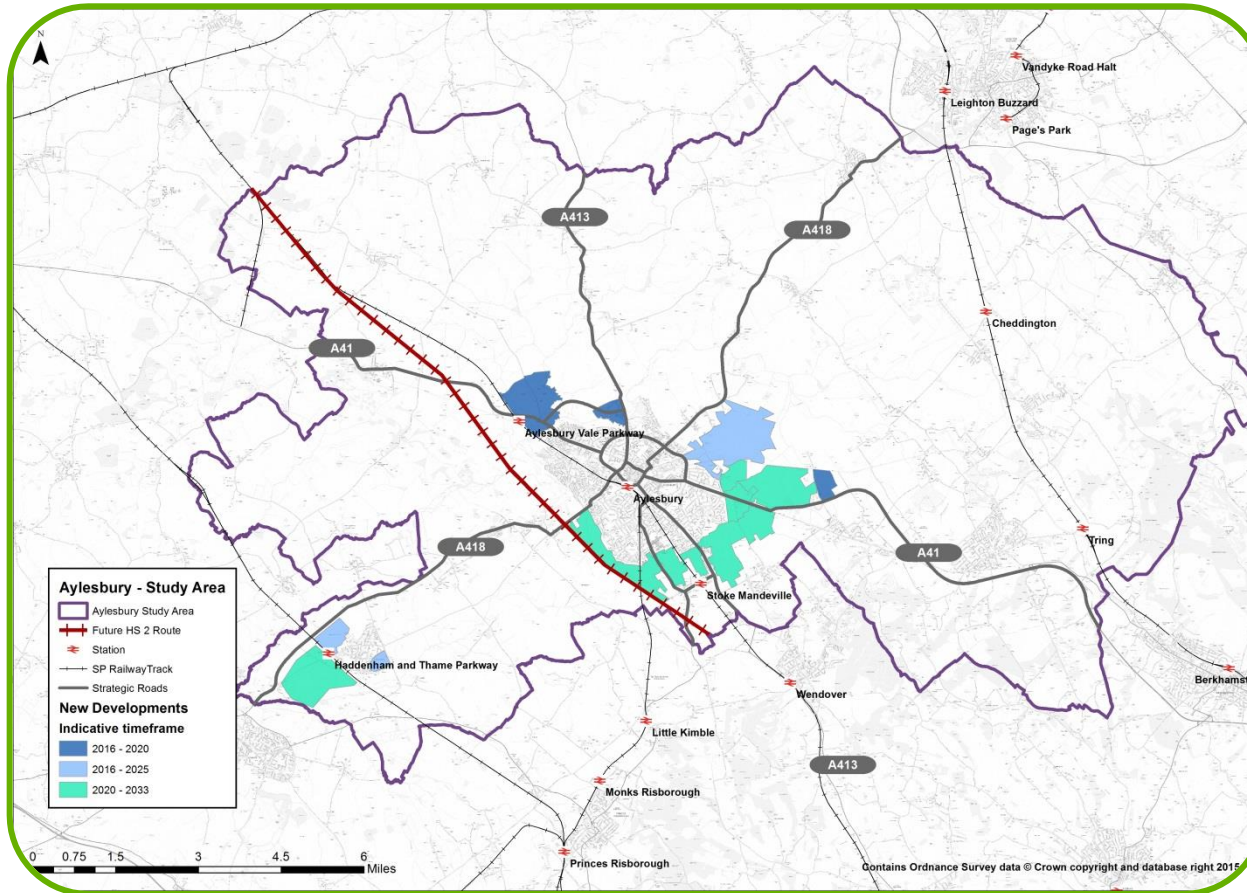
Improved cycling and walking access to bus and rail stations and an increase in the quality and supply of cycle parking have also been opportunities identified to increase an uptake in these modes.

Car Parking

Aylesbury town centre is served by various car parks and there is currently little disincentive for people driving to the town centre. There is a large supply of parking within the town centre and public car parks offer a capacity of over 2,500 car spaces through eleven parking sites, with an additional 2,000 car spaces provided by retailers (whilst intended for customers only but also used for accessing the town centre). It has been identified in the *Aylesbury Parking and Access Study Final Report (2011)*, that supply of parking currently exceeds demand in Aylesbury town centre, however, the study is shortly to be updated to reflect current and future demands.

Future Development

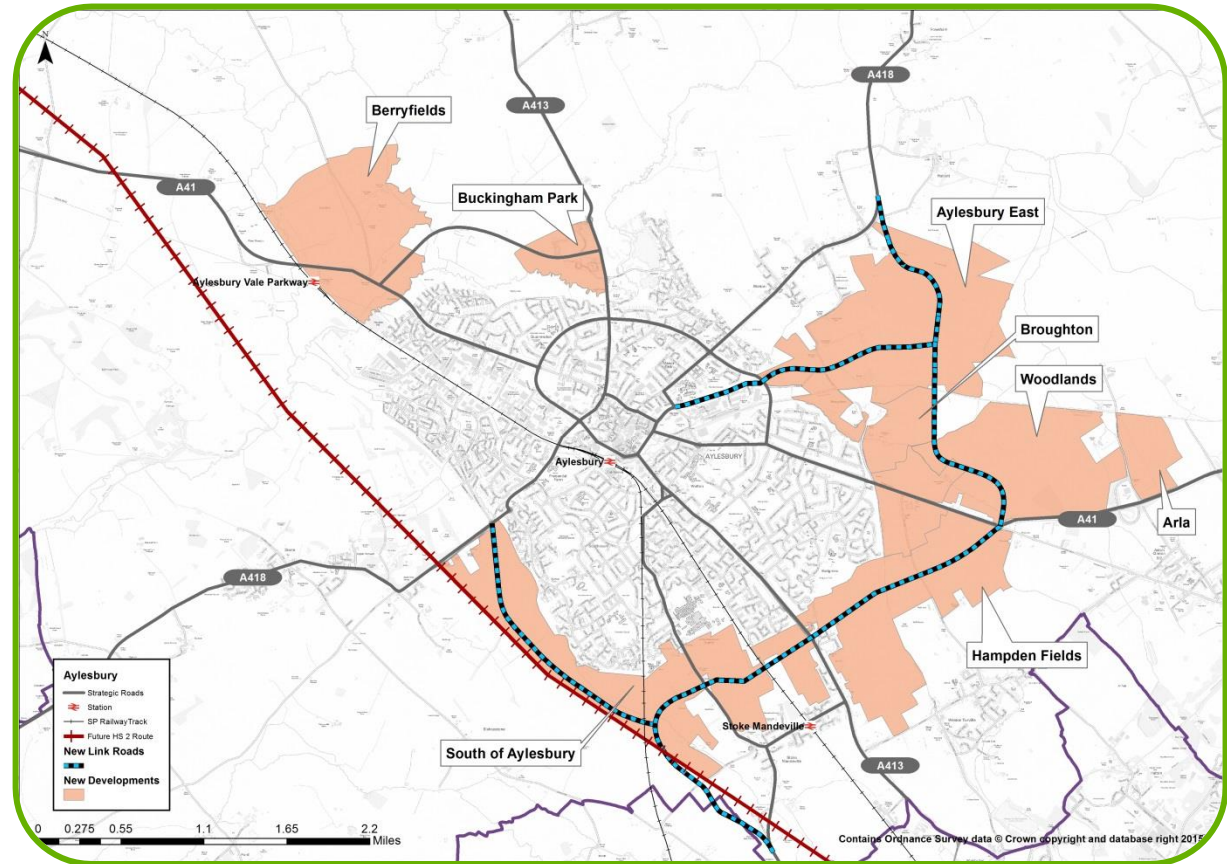
There are many developments currently expected to come forward over the life of the strategy within the surrounding area of Aylesbury, including both residential and employment growth. Information supplied by AVDC sets out expected growth up to 2033 and the quantum shown on the map below is current at the time of writing the ATS. It is acknowledged that the planned developments are indicative and some still need to progress through the planning process.



Any growth beyond 2033 will likely be considered in future versions of the transport strategy. The majority of growth is located in an arc shape south of the A418. Sites are already being developed to the north-west of the town and there is also development being considered at Haddenham, which would influence Aylesbury (the location of the Haddenham development is only indicative at this stage).

Associated with this growth is a network of new link roads through and around the new developments which are shown in the map adjacent. If implemented, they will introduce part of an outer link road network around the town and redirect through traffic from the town centre to peripheral routes. This will help reduce congestion and delays on existing routes and allow road space to be reallocated to other modes.

Congestion and delays around Aylesbury will only continue to worsen if the significant amount of growth expected in new developments around the town goes ahead without any mitigation measures to the transport network.



Summary of Transport Improvements

This section describes the transport improvements that have been developed in response to the transport issues and growth described above. The table below shows the full set of improvements included in the strategy, which are described in further detail within the Implementation Plan.

Transport Improvement (TI)			
1	Implement new outer road links	14	Increase the supply of cycle parking
2	Improve safety on the highway network	15	Introduce a cycle hire facility
3	Restrict through traffic within Aylesbury town centre	16	Improve safety in the pedestrian network
4	Implement a low emission zone for the centre of Aylesbury	17	Improve the pedestrian network and public realm in the town centre area
5	Analyse parking provision and controls	18	Ensure accessibility for all within the town and to key destinations
6	Provide a Park & Ride system	19	Provide or upgrade active travel information
7	Improve transport links to the railway stations	20	Improving access to travel information
8	Upgrade the existing bus station in Aylesbury town	21	Promote cycling, walking and public transport travel through awareness campaigns
9	Implement bus priority measures	22	Ensure accessibility within new developments
10	Improve the local bus network	23	Ensure connectivity to and between new developments
11	Improve the regional bus network	24	Develop a robust tool to test improvements to transport network
12	Integrate public transport ticketing	25	Update transport infrastructure to accommodate future transport technology
13	Improve the cycle network		

Each transport improvement was assessed to determine how well they support the strategy objectives and described in a pro-forma that sets out the benefits and risks in more detail, including transport benefits, fit with the strategy objectives, potential risks in the implementation and potential sources of funding. Further details of this can be found in the full strategy online, titled *The Aylesbury Transport Strategy - January 2017*.

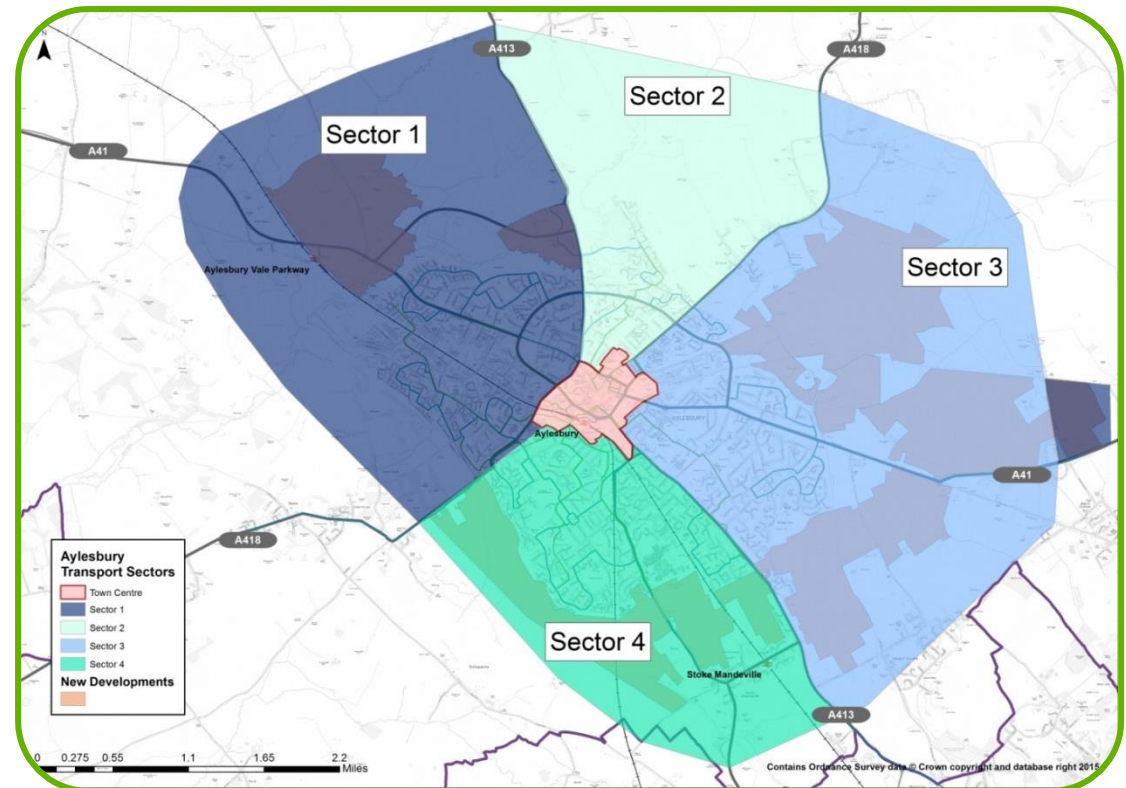
Implementation Plan

Following the development of the list of transport improvements, Aylesbury was divided into Transport Sectors to focus and target the improvements to specific areas. Many of the transport improvements identified will be applied across Aylesbury; however it is important that some are targeted into specific sectors for the following reasons:

- Many of the new highway links are linked to potential new developments and are critical to the implementation of other transport improvements. For example, implementing bus lanes and reducing capacity on key arterial routes into Aylesbury would only be considered once alternative routes (i.e. the outer link roads) have been provided;
- Phasing of the sectors will help reduce the impact of construction over the next 20 years around Aylesbury;
- Timeframes of external schemes such as HS2 and East West Rail will impact the timing of implementing the transport improvements around Aylesbury; and
- Dividing Aylesbury into sectors will allow internal and external stakeholders to focus on certain areas of the town and maximise opportunities for working in partnership as schemes progress.

The five Transport Sectors identified in collaboration with BCC/AVDC are described below and identified in on the map.

- **Town Centre Sector:** The boundary of this sector was defined by AVDC and is the confluence of the existing highway and public transport networks. It is recognised this area could change greatly if many of the transport improvements are implemented;
- **Sector 1 in west Aylesbury:** This contains the recent developments at Berryfields and Buckingham Park, the new link road between them and the A41 and A413. The A41 is the main corridor in the sector which also links to the key industrial estate in the town. Aylesbury Vale Parkway Station is located in this sector;
- **Sector 2 in north Aylesbury:** This sector does not contain any proposed development but there are still local aspirations for a link road between the A413 and A418. This sector could be impacted by possible infrastructure changes and plans for the A418 outside Aylesbury;

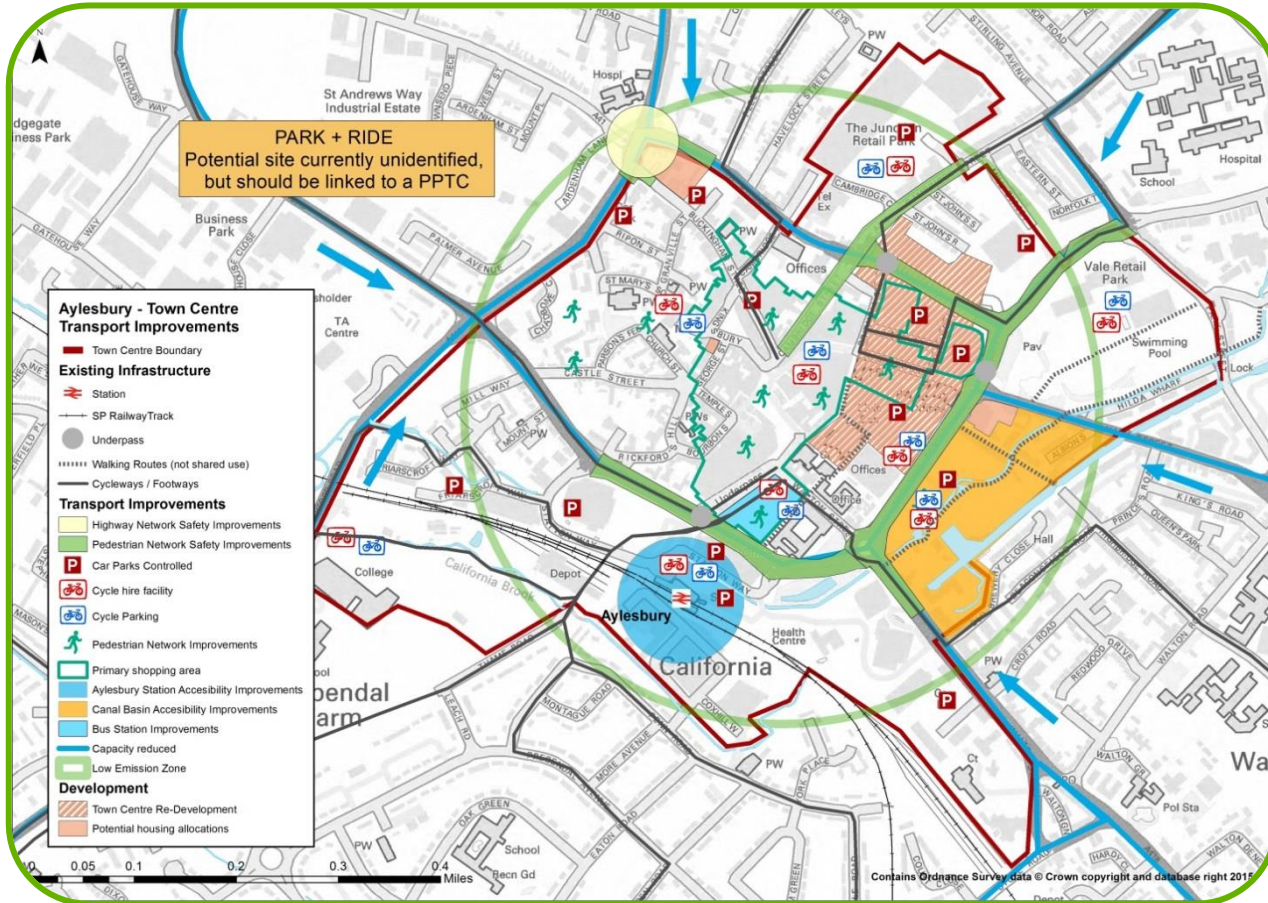


- **Sector 3 in east Aylesbury:** This sector contains the proposed developments at Aylesbury East, Broughton, Woodlands and Hampden Fields and their associated network of link roads. The key route in the area is the A41 which links to Tring and the M25; and
- **Sector 4 in south Aylesbury:** This sector contains the A413 and B4443, key routes into Aylesbury from the south. The South of Aylesbury development is planned in this sector. HS2 impacts will impact this area the most with the proposals for the A4010 and B4443/A413 link road. This sector contains Stoke Mandeville Station and Stadium, and Stoke Mandeville Hospital which is a key destination and employment site in Aylesbury and the wider district.

The following transport improvements will be applied across Aylesbury so are applicable to all sectors.

Transport Improvement Description	Town Centre Sector Details
Ensure accessibility for all within the town and to key destinations	Ensuring/adapting the infrastructure around the town centre to ensure it is inclusive to people of all levels of mobility. An accessibility study/audit is a high priority action in the <i>Aylesbury Town Centre Plan</i> and discussions are due to take place with Buckinghamshire user Disability Service (BuDs) to develop the brief.
Provide or upgrade active travel information	Upgrading the existing pedestrian and cycling signage within/around Aylesbury town centre (e.g. walking times signposted and walking/cycling maps displayed at key locations with a consistent branding, similar to the Legible London example).
Improving access to travel information	Improving access to travel information by providing a single central place to get travel information online and making it available through technology such as travel mobile apps.
Promote cycling, walking and public transport travel through awareness campaigns	Programs to encourage sustainable travel through directed awareness campaigns and travel planning. Key employment centres in the town centre should be targeted to encourage travel plans and promote alternative travel modes.
Develop a robust tool to test improvements to the transport network	Developing a transport model that can capture many of the transport improvements identified in this strategy to be able to identify both the potential for mode shift and impact to traffic flows in the highway and public transport network.
Update transport infrastructure to accommodate future transport technology	Identify future trends in transport such as electric vehicles and driverless technology and how existing transport infrastructure should be upgraded to accommodate this and new infrastructure designed to incorporate upcoming advances in technology, e.g. an increase in the number of electric vehicle charging points within car parking sites around the town centre.

The remainder of this section details the transport improvements specific to each sector and the suggested phasing of implementation.

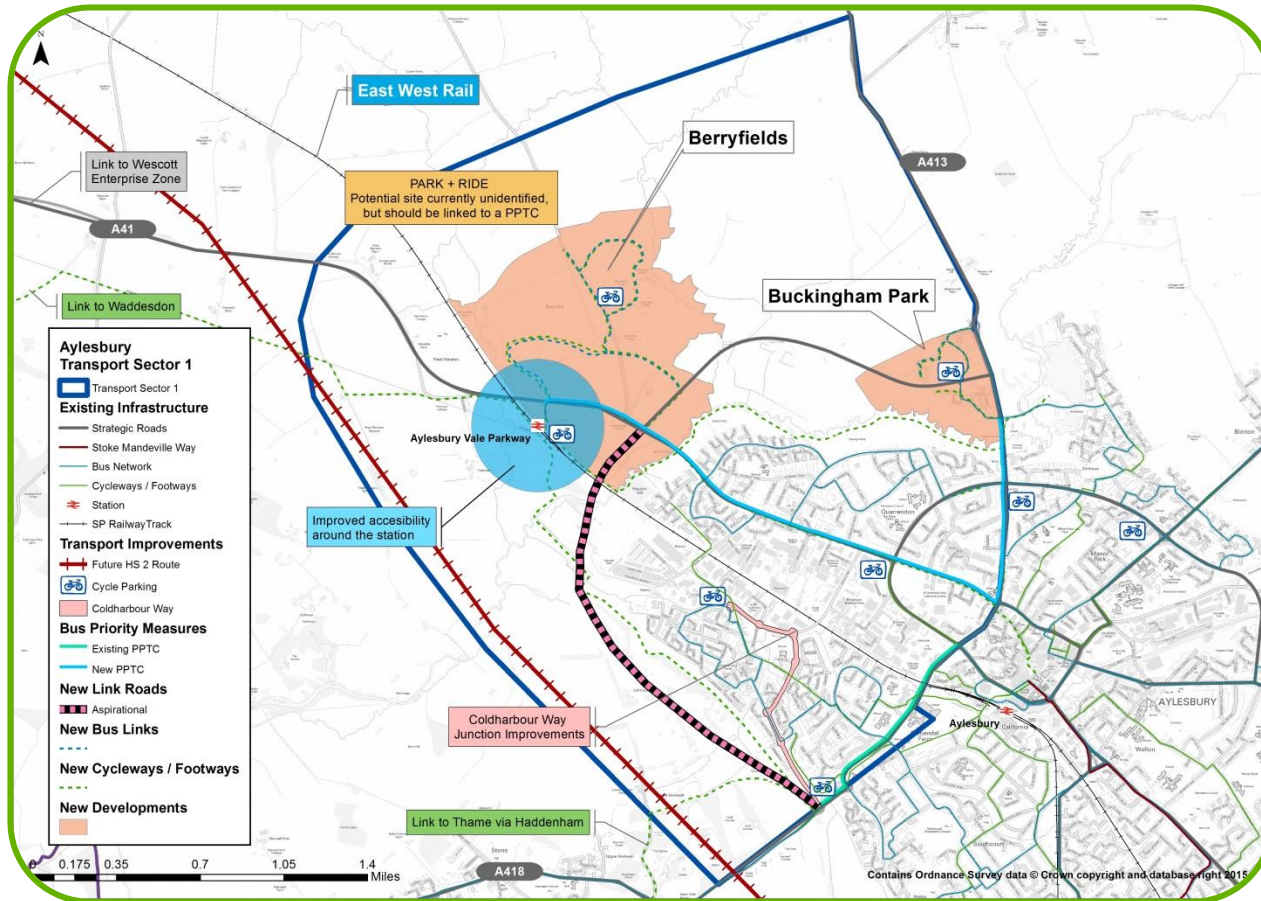


Town Centre

The transport improvements in the town centre are shown in the map below. Not all transport improvements are shown, but the full set are described in the table below.

Town Centre Transport Improvement	Description
Improve safety on the highway network	Ensure conflicts between modes are minimised and a safety improvement scheme is implemented at the triple roundabout junction outside the Royal Buckinghamshire Hospital
Restrict through traffic within Aylesbury town centre Implement a low emission zone for the centre of Aylesbury Analyse parking provision and controls	<p>Traffic reduction measures on key routes into the town centre - only once all outer link roads are implemented.</p> <p>Aim to discourage high emission vehicles from the town centre where possible. This will link to the outer link roads providing alternative routes for traffic. A low emission zone could be proposed at certain times of the day initially to deter certain vehicle movements at peak times.</p> <p>There are currently over 4,000 parking spaces in the town centre. The level of demand should be assessed so possible reallocations or reductions in supply can be made. There is a need for a town-wide parking strategy and parking provision in the Town Centre Sector will play a key role in this.</p>
Provide a Park & Ride system Improve transport links to the Rail Station	<p>Should this progress as a longer term scheme as it would need bus priority lanes in place, consideration should be given to a possible pick up/drop off site within the town centre.</p> <p>Access to Aylesbury Rail Station should be considered in all town centre improvements. The impact of East West Rail on passenger numbers should be carefully examined and monitored. Interchange with other transport modes should be examined and improved where possible in all transport improvements.</p>
Upgrade the existing bus station in Aylesbury town Implement bus priority measures Improve the local bus network Improve the regional bus network	<p>Increase capacity and possible relocation or expansion to a second site in the long term, possible locations need to be considered. Also review accessibility to current site.</p> <p>Implementation of bus priority measures on the main bus corridors converging on the Town Centre. This may depend on traffic reductions generated by the link road network, and link to a possible future public transport strategy.</p> <p>Ensuring all local bus services can link to, or serve, key destinations in the town centre and interchange opportunities are maximised.</p> <p>Ensure regional bus services can access the bus station easily and conveniently. Liaise regularly with operators to ensure desired routes are provided.</p>
Integrate public transport ticketing	Development of a uniform and coherent, smart public transport ticketing system, particularly for use at the railway and bus station.
Improve the cycle network	Ensure all links to/from and around the town centre are provided and desired cycle movements are catered for where possible.
Increase the supply of cycle parking	Ensure there is sufficient supply of cycle parking to meet current and future demand, particularly at key attractors and employment sites.

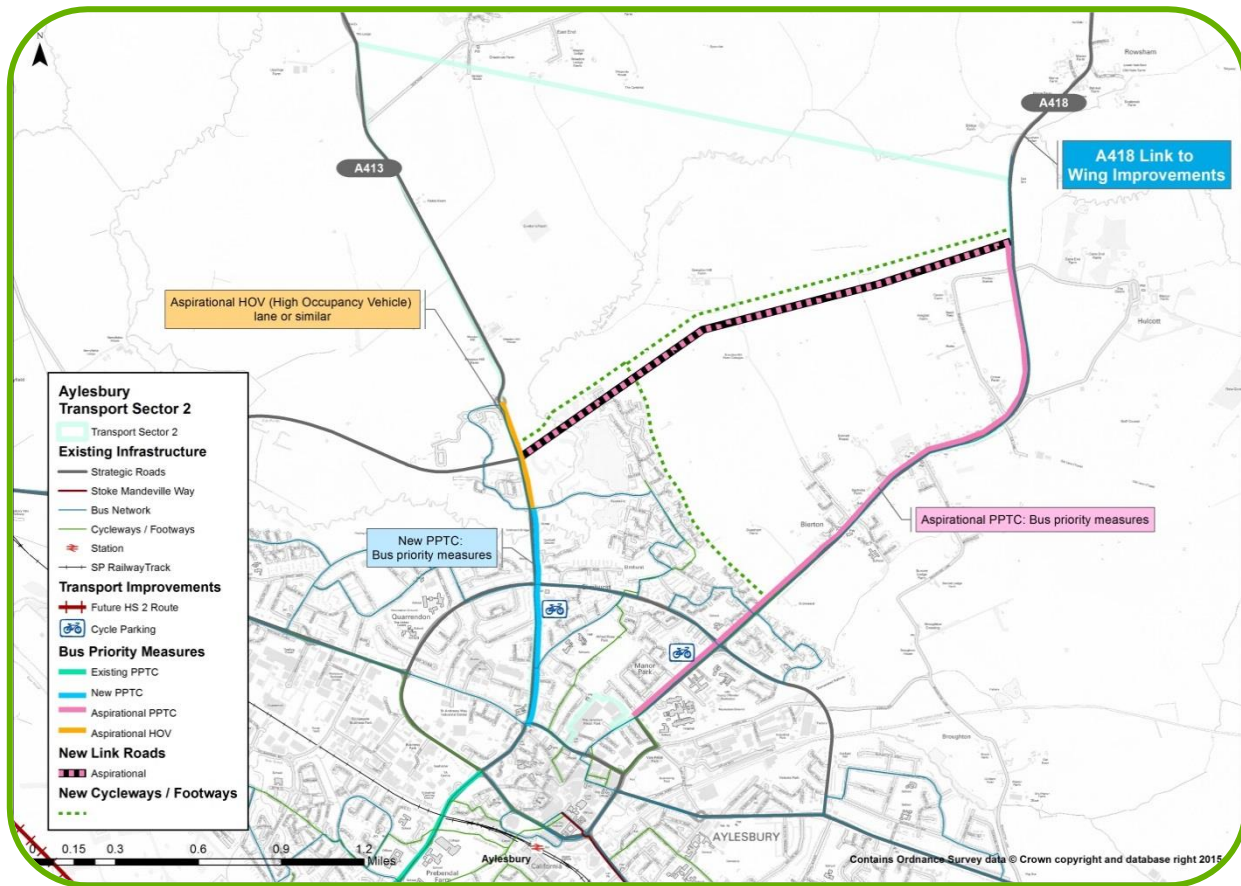
Introduce a cycle hire facility	Key attractors in the town centre should be included in any cycle hire scheme. Acknowledged this is a longer term ambition for Aylesbury.
Improve safety in the pedestrian network	Reduce the likelihood of pedestrian accidents at crossing points within the town and accommodate pedestrian desire lines to/from destinations where possible
Improve the pedestrian network and public realm in the Town Centre area	Undertake a detailed review of pedestrian movements within the town centre area, which may involve creating shared spaces and removing traffic at particular sites where the pedestrian movements are predominant. This improvement aims to increase safety and improve the public realm. Links to the areas known as Waterside South which includes the canal basin should also be maximised as it is regenerated.



Sector 1

The transport improvements in Sector 1 are shown in the map below. Not all transport improvements are mapped, but all are included in the table below.

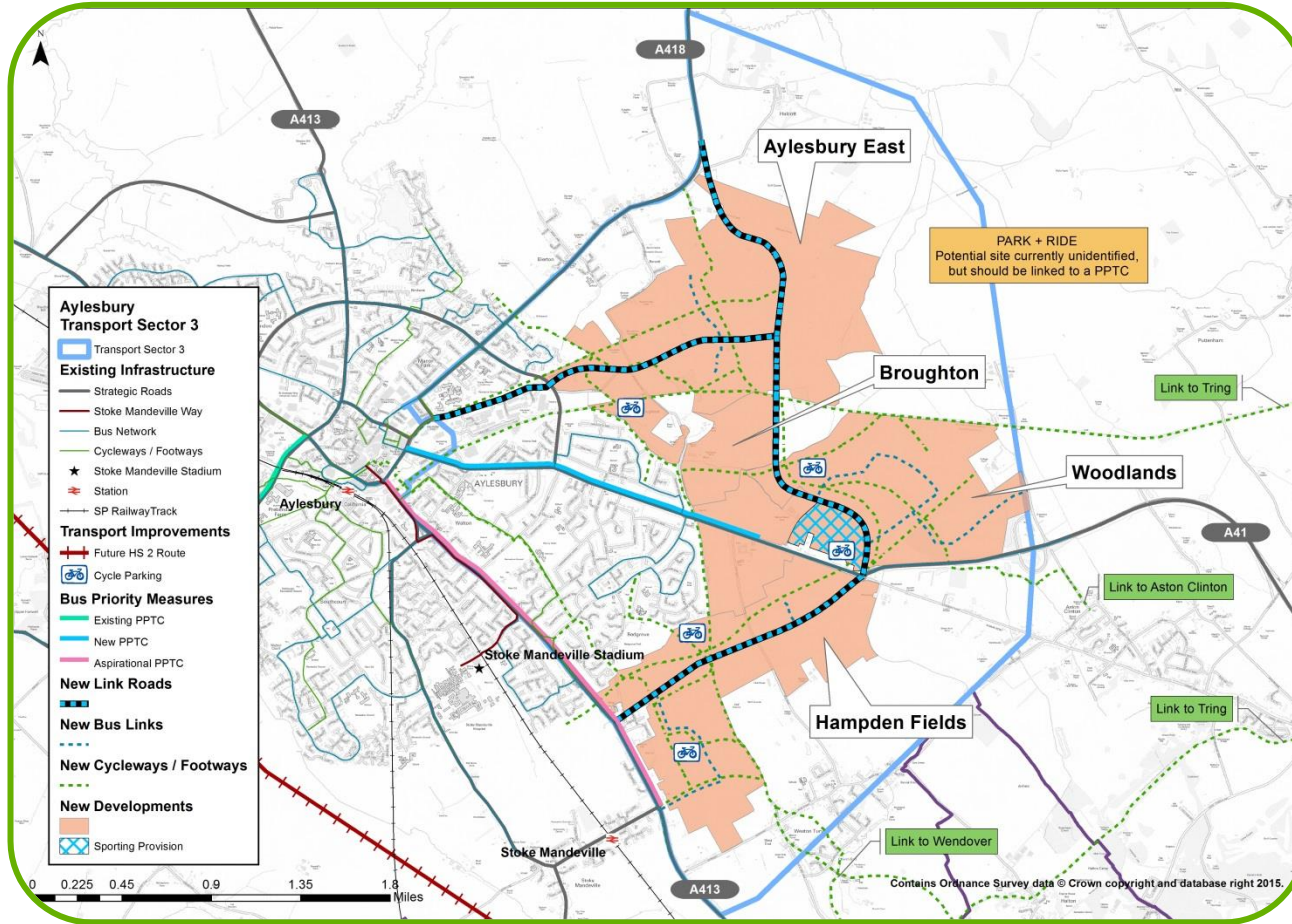
Sector 1 Transport Improvement	Description
Implement new outer link roads	The proposed link road between the A418 and A41 is purely aspirational at present.
Improve safety on the highway network	Ensure conflicts between modes are minimised and ongoing monitoring will identify any additional hazardous sites in the sector. The Bicester Road/Rabans Lane and A41/Bicester Road/A4157 junctions are known collision hotspots where safety improvements will be investigated.
Provide a Park & Ride system	Should this progress in the longer term, a site on the outskirts of Aylesbury in Sector 1 may be identified.
Improve transport links to the railway stations	Links to Aylesbury Vale Parkway Station should be maximised for all modes.
Implement bus priority measures	A possible PPTC on the A41 approaching Aylesbury is a longer term ambition.
Improve the local bus network	Bus services are planned to serve the new developments and usage/demand should be monitored to ensure all needs are met. Links to the rail station should be regularly reviewed to ensure coverage.
Integrate public transport ticketing	Development of a uniform and coherent, smart public transport ticketing system, particularly for use at the railway station.
Improve the cycle network	Cycle links to/around the new developments and links to Waddesdon and Haddenham are planned. All routes should also link to the railway station and regular reviews undertaken.
Increase the supply of cycle parking	Ensure there is sufficient supply of cycle parking to meet current and future demand, particularly in new developments and at key attractors (rail station, employment sites).
Improve safety in the pedestrian network	Ensure all pedestrian desire lines are completely accessible and safe around the rail station and to/from key destinations in Sector 1.
Ensure accessibility within new developments	Ensure all services provided within the developments are fully accessible as are links to the existing public transport services.
Ensure connectivity to and between new developments	Links between developments should be provided for all modes, especially walking, cycling and public transport.
Develop a robust tool to test improvements to the transport network	Develop a transport model that can capture many of the transport improvements identified in this strategy to be able to identify both the potential for mode shift and impact to traffic flows in the highway and public transport network.
Update transport infrastructure to accommodate future transport technology	Identify future trends in transport such as electric vehicles and driverless technology and how existing transport infrastructure should be upgraded to accommodate this and how new infrastructure can be designed to incorporate upcoming advances in technology, e.g. an increase in the number of electric vehicle charging points at key destinations around Sector 1 (especially the industrial estate area and railway station).



Sector 2

The transport improvements in Sector 2 are shown in the map below. Not all transport improvements are mapped, but all are included in the table beneath.

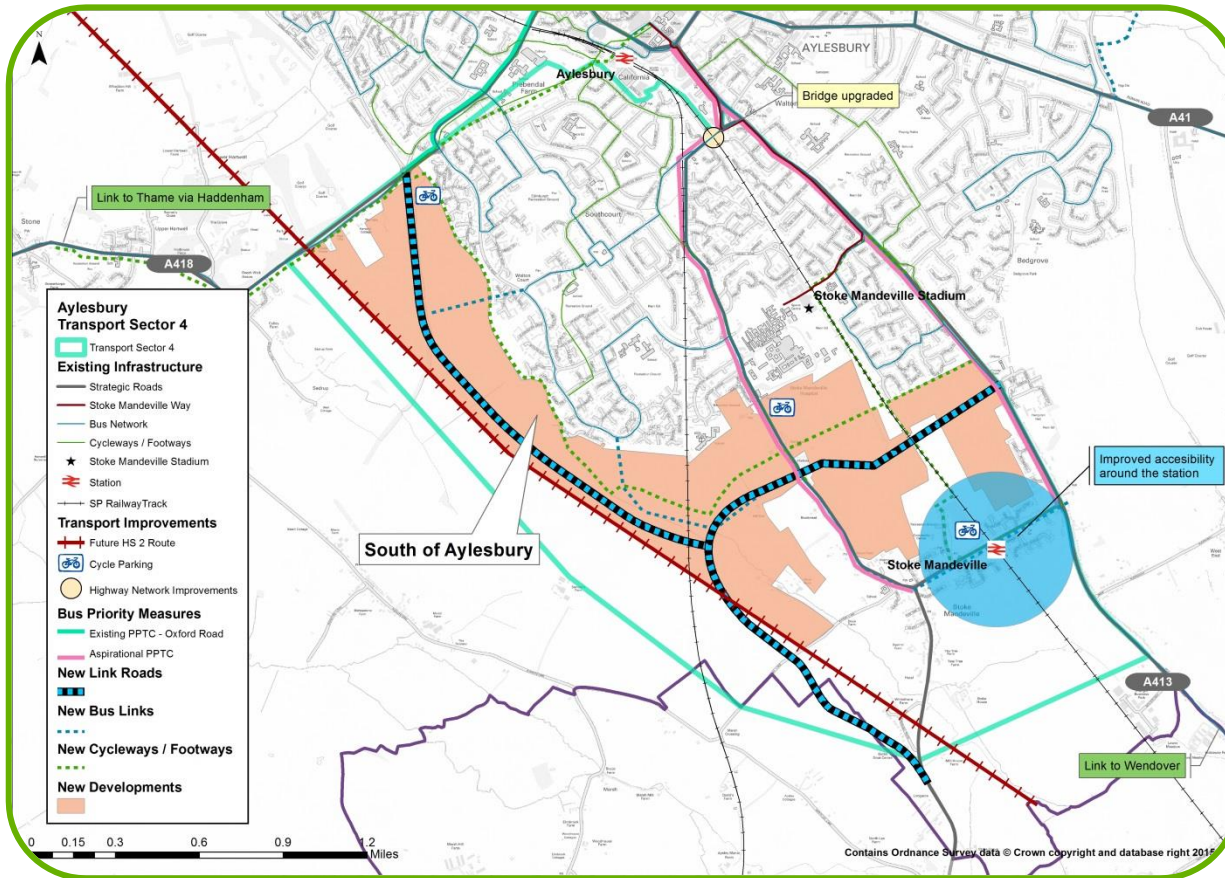
Sector 2 Transport Improvement	Description
Implement new outer link roads	The A413-A418 link road is still a priority although its future is currently unknown.
Improve safety on the highway network	Ensure conflicts between modes are minimised and ongoing monitoring will identify any additional hazardous sites in the sector.
Implement bus priority measures	A possible PPTC on the A418 approaching Aylesbury is a longer term ambition and could only be implemented if link roads are implemented which would reduce flows on this road.
Integrate public transport ticketing	Development of a uniform and coherent, smart public transport ticketing system.
Improve the cycle network	Cycle links between the A413 – A418 should be included if possible, even without the proposed link road.
Increase the supply of cycle parking	Ensure there is sufficient supply of cycle parking to meet current and future demand, particularly at key attractors.



Sector 3

The transport improvements in Sector 3 are shown in the map below. Not all transport improvements are mapped, but the full list is shown in the table beneath.

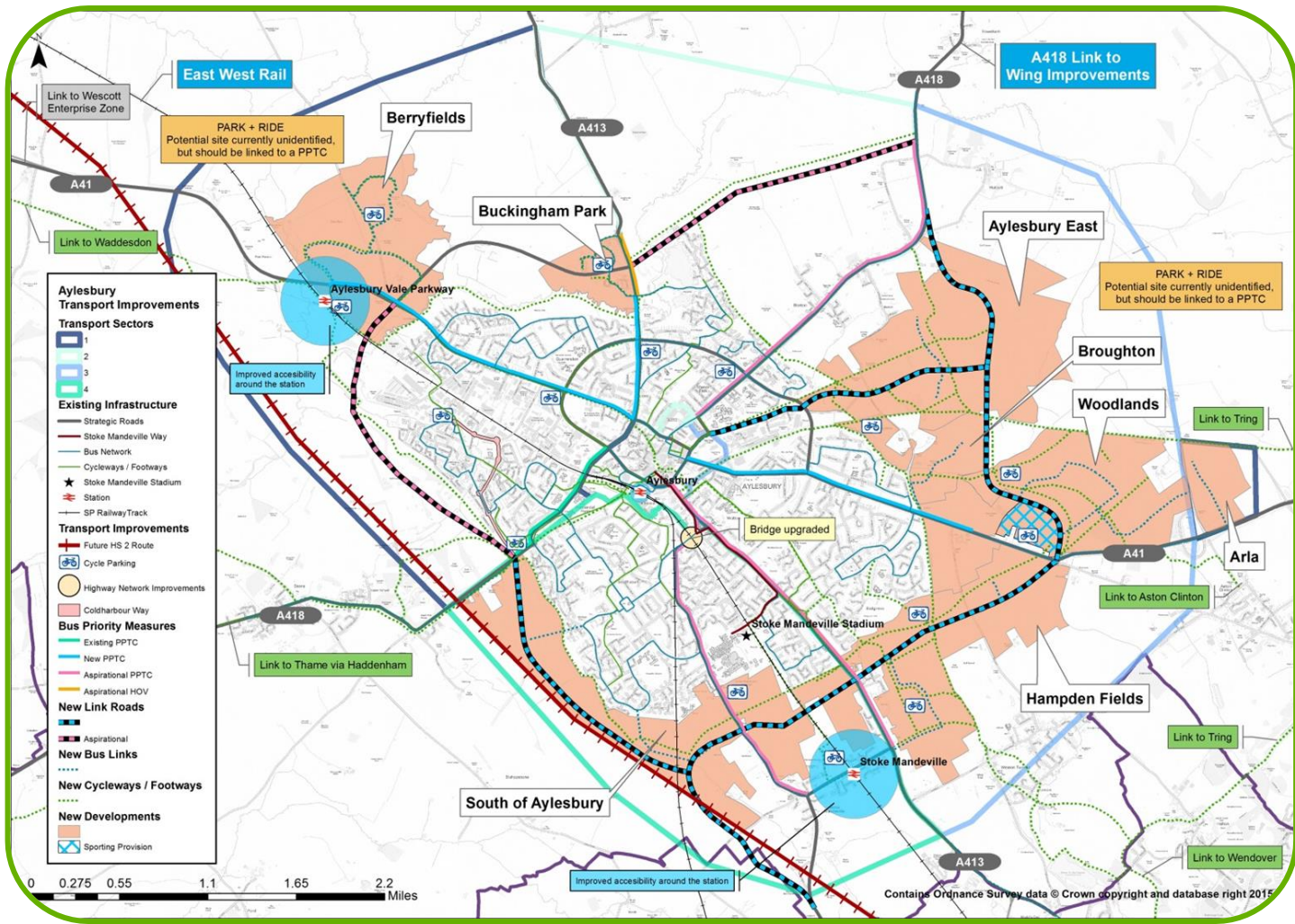
Sector 3 Transport Improvement	Description
Implement new outer link roads Improve safety on the highway network	Proposed new link roads through the Aylesbury East, Broughton, Woodlands and Hampden Fields developments are key to this sector. Ensure conflicts between modes are minimised and ongoing monitoring will identify any additional hazardous sites in the sector.
Provide a Park & Ride system Improve transport links to the railway stations	This is a longer term ambition and a potential Park & Ride site was identified in development proposals which may come forward in the longer term. Links to Stoke Mandeville and Tring stations should be optimised for all modes.
Implement bus priority measures Improve the local bus network	Possible PPTCs on the A41 and A413 approaching Aylesbury are longer term ambitions and could only be implemented if link roads are implemented which reduce flows on this roads. Bus services are proposed to link to the new developments and usage/demand should be monitored to ensure all needs are met. Links to the rail station should be regularly reviewed to ensure adequate coverage.
Integrate public transport ticketing	Development of a uniform and coherent, smart public transport ticketing system.
Improve the cycle network Increase the supply of cycle parking	Cycle links to/around the new developments and links to Waddesdon and Haddenham are planned. All routes should also link to the railway station and regular reviews undertaken. Turnfurlong is a key cycling access to the town centre where parked cars and accessibility constraints hamper movements. This should be addressed. Ensure there is sufficient supply of cycle parking to meet current and future demand, particularly in new developments and at key attractors and employment sites.
Improve safety in the pedestrian network	Ensure all pedestrian routes to and between new developments are safe and convenient
Ensure accessibility within new developments	Ensure all services provided within the developments are fully accessible as are links to public transport services.
Ensure connectivity to and between new developments	Links between developments should be provided for all modes, especially walking, cycling and public transport.



Sector 4

The transport improvements in Sector 4 are shown in the map below. Not all transport improvements are mapped, but all are included in the table beneath.

Sector 4 Transport Improvement	Description
Implement new outer link roads	Proposed realigned and new link roads in this Sector are key to the continued growth of Aylesbury
Improve safety on the highway network	Ensure conflicts between modes are minimised and ongoing monitoring helps identify any new collision sites in the Sector
Improve transport links to the railway stations	Links to Stoke Mandeville Station should be maximised for all modes.
Implement bus priority measures	Possible PPTCs on the A413 and B4443 approaching Aylesbury are longer term ambitions and could only be implemented if link roads are implemented which reduce flows.
Improve the local bus network	Bus services are planned to serve the new developments and usage/demand should be monitored to ensure all needs are met. Links to the Rail Station should be regularly reviewed to ensure coverage.
Integrate public transport ticketing	Development of a uniform and coherent, smart public transport ticketing system, particularly for use at the railway station.
Improve the cycle network	Cycle links to/around the new developments and links to Wendover and Haddenham are planned. All routes should also link to the railway station and regular reviews undertaken. Synergies with HS2 proposals should be maximised.
Increase the supply of cycle parking	Ensure there is sufficient supply of cycle parking to meet current and future demand, particularly in new developments and at key attractors and employment sites.
Improve safety in the pedestrian network	Ensure all pedestrian routes to and between new developments are safe and convenient as well as to key attractors
Ensure accessibility within new developments	Ensure all services provided within the developments are fully accessible as are links to the existing public transport services.
Ensure connectivity to and between new developments	Links between developments should be provided by all modes, especially walking, cycling and public transport.



Finally, the map adjacent summarises the combined set of transport improvements discussed above across Aylesbury.

These are set out in an implementation plan in the table below.

Implementation Timeframe	Town Centre Transport Improvements	Sector 1 Transport Improvements	Sector 2 Transport Improvements	Sector 3 Transport Improvements	Sector 4 Transport Improvements
Short Term: 2016 - 2020	<ul style="list-style-type: none"> Ensure all transport policies align within BCC/AVDC Improve safety on the highway network Analyse parking provision and controls Integrate public transport ticketing Improve transport links to the railway system Improve the cycle network Increase the supply of cycle parking Improve safety in the pedestrian network Ensure accessibility for all within the town and to key destinations including the canal basin Provide or upgrade active travel information Improving access to travel information Develop a robust tool to test improvements to the transport network Update transport infrastructure to accommodate future transport technology 	<ul style="list-style-type: none"> Improve safety on the highway network Improve the local bus network Integrate public transport ticketing Improve the cycle network Increase the supply of cycle parking Improve safety in the pedestrian network Ensure accessibility for all within the town and to key destinations Provide or upgrade active travel information Improving access to travel information Ensure accessibility within new developments Develop a robust tool to test improvements to the transport network Update transport infrastructure to accommodate future transport technology 	<ul style="list-style-type: none"> Improve safety on the highway network Integrate public transport ticketing Ensure accessibility for all within the town and to key destinations Improve safety on the highway network Provide or upgrade active travel information Improving access to travel information Develop a robust tool to test improvements to the transport network Update transport infrastructure to accommodate future transport technology 	<ul style="list-style-type: none"> Improve safety on the highway network Integrate public transport ticketing Improve the cycle network Increase the supply of cycle parking Ensure accessibility for all within the town and to key destinations Provide or upgrade active travel information Improving access to travel information Develop a robust tool to test improvements to the transport network Update transport infrastructure to accommodate future transport technology 	<ul style="list-style-type: none"> Implement new outer link roads Improve safety on the highway network Improve transport links to the railway stations Integrate public transport ticketing Improve the cycle network Increase the supply of cycle parking Ensure accessibility for all within the town and to key destinations Provide or upgrade active travel information Improving access to travel information Develop a robust tool to test improvements to the transport network Update transport infrastructure to accommodate future transport technology
Medium Term: 2020 - 2025	<ul style="list-style-type: none"> Commercial/residential redevelopment Improve the pedestrian network and public realm in the Town Centre area Improve the local bus network Improve the regional bus network Upgrade the existing bus station in Aylesbury town Promote cycling, walking and public transport travel through awareness campaigns 	<ul style="list-style-type: none"> Improve transport links to the railway station Promote cycling, walking and public transport travel through awareness campaigns Ensure connectivity to and between new developments Coldharbour Way Improvements 	<ul style="list-style-type: none"> Improve the cycle network Increase the supply of cycle parking Promote cycling, walking and public transport travel through awareness campaigns 	<ul style="list-style-type: none"> Implement new outer link roads Improve transport links to the railway stations Improve the local bus network Improve safety in the pedestrian network Promote cycling, walking and public transport travel through awareness campaigns Ensure accessibility within new developments Ensure connectivity to and between new developments 	<ul style="list-style-type: none"> Improve the local bus network Improve safety in the pedestrian network Promote cycling, walking and public transport travel through awareness campaigns Ensure accessibility within new developments Ensure connectivity to and between new developments
Long Term: 2025 - 2033	<ul style="list-style-type: none"> Restrict through traffic within Aylesbury Town Centre Implement a low emission zone for the centre of Aylesbury Implement bus priority measures Introduce a cycle hire facility Provide a Park & Ride system 	<ul style="list-style-type: none"> Implement new outer link roads Provide a Park & Ride system Implement bus priority measures 	<ul style="list-style-type: none"> Implement new outer link road Implement bus priority measures Investigate HOV lane or similar on A418 	<ul style="list-style-type: none"> Provide a Park & Ride system Implement bus priority measures 	<ul style="list-style-type: none"> Implement bus priority measures

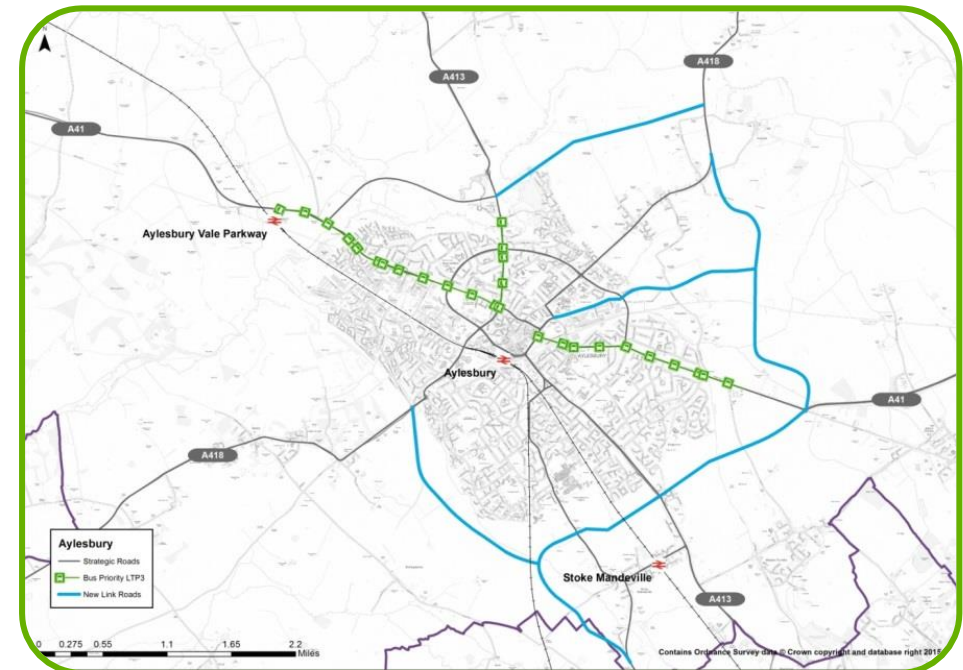
Transport Evidence Base

Computer packages have been used to test the local plan growth and proposed improvements in the highway network across Buckinghamshire. This has informed our understanding of the impacts of the future growth on the highway network in Aylesbury and also enabled some initial testing of some of the highway improvements identified in this strategy, such as the outer link roads.

Models have been constructed to show the existing and future transport conditions on the highway network. The base network reflects the 2013 road network, whereas the future network reflects the 2033 road network scenarios across Buckinghamshire. The future network reflects not only additional infrastructure schemes (e.g. new roads/junctions) but also the increased demand for journeys generated by the increased population in and around Buckinghamshire.

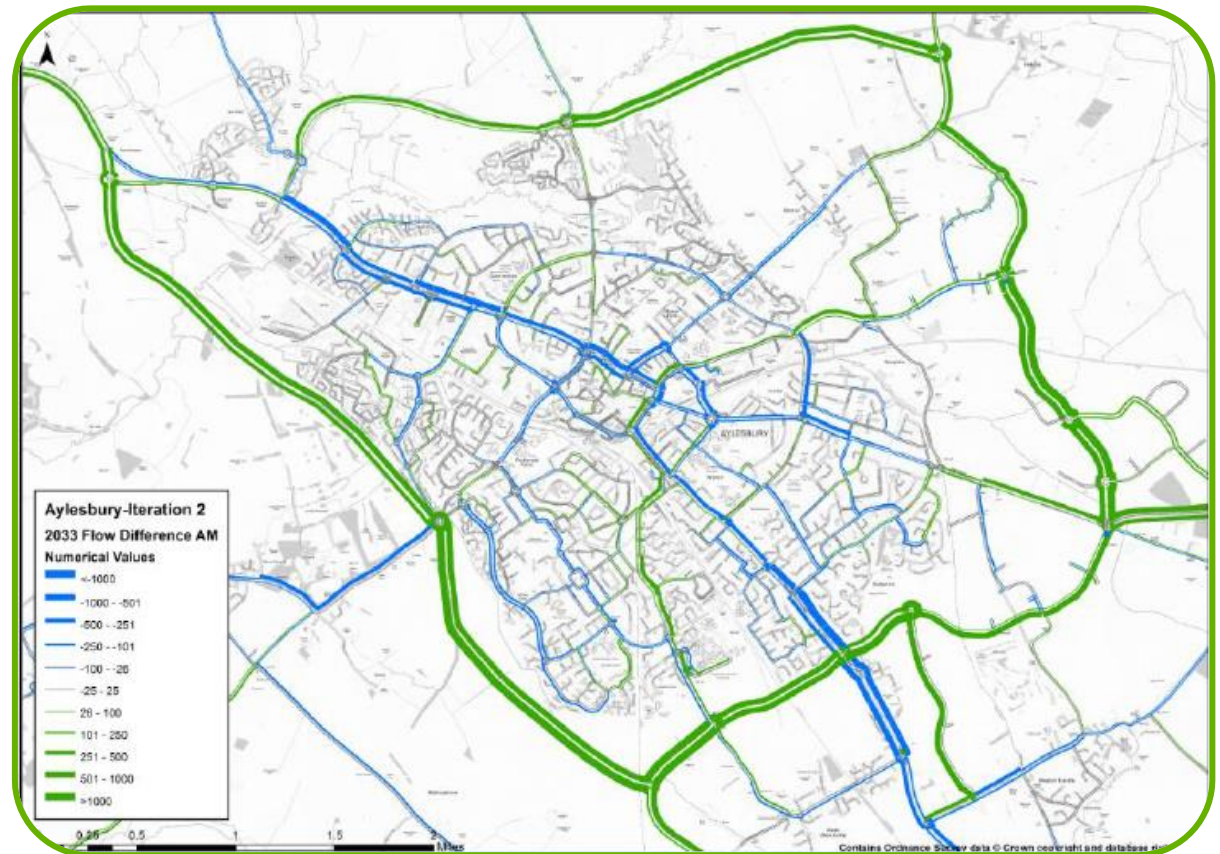
The 2033 future highway scenario from the simulation software shows that with already committed transport schemes in place (i.e. those definitely going ahead), congestion is still predicted around the A41, A413 and B4443. Whilst congestion has already been identified at these locations in the 2013 scenario, the increase is most likely linked to development already going ahead and proposed in the future.

A further scenario modelled the impacts of the proposed new link roads which are linked to developments, and one aspirational link road between the A413 and A418 in northern Aylesbury. The new link roads, and public transport corridors, included in this model scenario are shown in the adjacent map. It is acknowledged that this scenario is aspirational and dependant on many external factors, however it is important to assess the possible wider changes which may be seen in Aylesbury.



The impacts of the outer link road network and public transport corridors in Aylesbury can be seen in the figure adjacent, based on the modelling results. Roads in green represent an increase in flows and roads in blue represent a reduction in flows. The thicker the line, the greater the increase or reduction in flows. It can be seen that the outer link road network reduces traffic flow on some arterial routes and around the town centre.

Overall, the results indicate how the proposed new link roads around Aylesbury can help to alleviate traffic on the existing inner roads, providing space for infrastructure to support alternative modes on these roads, such as new shared paths or bus lanes. This therefore highlights that the infrastructure improvements proposed in this strategy support the objectives, highlighting that the strategy is likely to positively support the proposed growth.



Summary and Next Steps

The ATS is intended to determine the overall direction of transport infrastructure in Aylesbury up to 2033. To facilitate the progression of transport schemes and interventions which are likely to be required to successfully facilitate the planned growth, it is important to consider the following next steps:

- **Highways:** results from the computer packages provide a high level evidence base for the potential highway schemes in this ATS. As a next step, feasibility of schemes should be assessed using early option generation and sifting processes. Examples of best practice and lessons learnt should be referred to during option sifting/scheme design. This will help create initial scheme details/designs which can then be assessed by stakeholders, defined, prioritised and progressed to business cases where appropriate. This will ensure the interventions provide value for money.
- **Public transport:** the implementation of the public transport improvements should be preceded by work to understand the likely users/benefits and feasibility. This will ensure future proofing of potential interventions and seek to maximise a step change in modal shift, whilst also enabling innovative approaches to be incorporated.
- **Walking/cycling:** a holistic approach across Aylesbury should be taken forward to estimate the likely users and benefits of the proposed walking and cycling infrastructure. Furthermore, scheme design should be considered to ensure any potential constraints are identified early on in the process and therefore overcome efficiently.

In addition to these, the likelihood and phasing of developments in and around Aylesbury are subject to ongoing planning applications and finalising the VALP, therefore changes to future development planning will impact the prioritisation and implementation of the transport improvements discussed.

The results of this consultation will be considered in the final version of the strategy, which will be used to inform the future Pre-Submission Consultation of the VALP in early 2017.