

APPENDIX G: TECHNICAL NOTE 19 (SUSTAINABLE TRANSPORT STRATEGY)



WEST MIDLANDS INTERCHANGE

SUBJECT: Technical Note 19 - Sustainable Transport Strategy

DATE: 07 May 2018

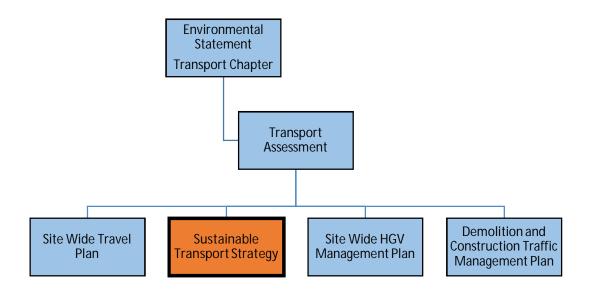
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1 Introduction

- 1.1 WSP has been commissioned by Four Ashes Limited to provide transport advice in relation to the proposed development of a Strategic Rail Freight Interchange (SRFI) on land located at Four Ashes, Staffordshire. The Site is located approximately 10km north of Wolverhampton and lies immediately west of Junction 12 of the M6
- 1.2 The development, known as West Midlands Interchange (WMI), will include;
 - An intermodal freight terminal with direct connections to the West Coast Main Line, capable of accommodating up to 10 trains per day and trains of up to 775m long, including container storage, Heavy Goods Vehicle ('HGV') parking, rail control building and staff facilities;
 - Up to 743,200 square metres (gross internal area) of rail served warehousing and ancillary service buildings;
 - New road infrastructure and works to the existing road infrastructure;
 - Demolition and alterations to existing structures and earthworks to create development plots and landscape zones;
 - Reconfiguring and burying of electricity pylons and cables; and
 - Strategic landscaping and open space, including alterations to public rights of way and the creation of new ecological enhancement areas and publicly accessible open areas.
- 1.3 A suite of documents including this Sustainable Transport Strategy is headed up by the Transport Chapter of the Environmental Statement. Diagram 1.1 shows the relationship between the Sustainable Transport Strategy and the suite of transport management plans and strategies



Diagram 1-1: Transport Document Hierarchy



- 1.4 The Transport Chapter of the ES addresses the environmental impacts associated with changes in traffic flow as a result of the Proposed Development. The Transport Assessment (TA) considers the transport strategy for the construction and operation of the Proposed Development.
- 1.5 The TA is supported by additional transport documents. These include the Site Wide Travel Plan (SWTP), the Demolition and Construction Traffic Management Plan (DCTMP) and the Site Wide HGV Management Plan (SWHGVMP). The implementation of these three documents will be secured through the DCO Requirements.
- 1.6 The SWHGVMP sets out the key requirements and management guidance for individual occupiers to follow and implement. It governs all HGV movements to and from the warehouses and rail terminal. The Site Wide Management Plan will be used as an overarching document within which individual occupiers will produce their own Occupier HGV Management Plans. Occupier HGV Management Plans will need to be approved in writing by the local planning authority prior to any warehouse or rail terminal being brought into use
- 1.7 The DCTMP provides details on the requirements for the management of transport impacts associated with the construction phases of the Proposed Development. Once the principal contractor has been appointed there will be opportunity for them to review and adjust the DCTMP in agreement with the local authorities.
- 1.8 The SWTP describes the various measures that would be implemented in order to maximise the use of non-car modes of transport for travel to/from the Proposed Development. In addition, there are proposals to improve walking and cycling infrastructure in the local area, to encourage further use of non-car modes of transport. The overall management and implementation of the SWTP will be the responsibility of the Travel Plan Co-ordinator under the employment of FAL. The SWTP will be used as an overarching document within which individual occupiers will produce their own



- Occupier Travel Plans (OTP). OTPs will be required to be in place prior to occupation of the rail terminal and new warehouse units on site.
- 1.9 This Sustainable Transport Strategy is also included as an appendix to the Transport Assessment. This sets out the strategy to improve the bus, walking and cycling infrastructure. . Monetary contributions towards key elements of the Sustainable Transport Strategy, including buses, will be secured through the Section 106 Agreement and improvements to walking and cycling infrastructure are secured by DCO requirements
- 1.10 This STS for the development, details opportunities to both reduce the demand for travel during peak periods on the network, and to access the Site using alternatives to single-occupancy car travel, such as on foot, bicycle, by public transport or sharing a car journey. This STS is informed by forecast employee commuting patterns, existing and planned sustainable transport infrastructure and service provision, and opportunities to work in partnership with local authorities and neighbouring employment hubs to deliver desirable outcomes.
- 1.11 The STS is presented under the following sub-headings:
 - Policy Context
 - Strategy aim and objectives
 - Forecast employee commuting patterns
 - Public transport strategy
 - Managing car-based commuting
 - Promoting active travel
 - Reducing travel demand
 - Conclusions

2 Policy Context

2.1 In developing this STS, specific transport and relevant land-use policy documents have been reviewed and these are summarised within this section.

National Policy Statement for National Networks (DfT 2014)

- 2.2 The National Policy Statement for National Networks (the 'NPS') provides the primary policy basis for the consideration of rail freight interchange ('RFI') and nationally significant infrastructure projects (NSIPs). The NPS contains policy statements across the full range of relevant planning considerations. The following bullet points summarise key policy statements applicable in this context:
 - Paragraph 2.47 of the NPS states "the siting of many existing rail freight interchanges in traditional urban locations means that there is no opportunity to expand, that they lack warehousing and they are not conveniently located for the modern logistics and supply chain industry".
 - Paragraph 2.56 states "it is important that SRFIs are located near the business markets they will serve – major urban centres, or groups of centres – and are linked to key supply chain routes. Given the locational requirements and the need for effective connections for both rail and road, the number of locations suitable for SRFIs will be limited, which will restrict the scope for developers to identify viable alternative sites".



- Paragraph 4.86 states "SRFIs involve large structures, buildings and the operation of heavy machinery, which can require continuous working arrangements. In terms of appropriate locations, the NPS therefore acknowledges that SRFIs often may not be suitable adjacent to built-up residential areas"
- Paragraph 3.15 states "The Government is committed to providing people with options to choose sustainable modes and making door-to-door journeys by sustainable means an attractive and convenient option. This is essential to reducing carbon emissions from transport".
- Paragraph 3.17 stresses the importance of accommodating pedestrians and cyclists; noting "there is a direct role for the national road network to play in helping pedestrians and cyclists. The Government expects applicants to use reasonable endeavours to address the needs of cyclists and pedestrians in the design of new schemes. The Government also expects applicants to identify opportunities to invest in infrastructure in locations where the national road network severs communities and acts as a barrier to cycling and walking, by correcting historic problems, retrofitting the latest solutions and ensuring that it is easy and safe for cyclists to use junctions".
- 2.3 This review of key policy statements in the NPS highlights that SRFIs are unlikely to be sited near to residential and built-up urban areas which are more conducive to facilitating access by sustainable transport options. Further, there is a clear policy directive to ensure a full range of sustainable travel and transport options are available to provide people with a genuine choice over their means of travel.

National Planning Policy Framework (DCLG 2012)

- 2.4 The National Planning Policy Framework (NPPF) outlines Government's planning policies applicable to England. The following paragraphs are notable in the context of this development proposal:
 - Paragraph 17 states an overarching policy objective to "actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable".
 - Paragraph 29 states "transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives.The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas".
 - Paragraph 32 requires that Plans and decisions should take account of whether:
 - "The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
 - o Safe and suitable access to the site can be achieved for all people; and
 - o Improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the developments".
- 2.5 Evidently the development proposals at WMI will need to consider the full range of transport options for access to and from the Site; promoting wherever possible sustainable transport options to help mitigate development impacts and provide viable travel choices for site users.



Staffordshire Local Transport Plan: Chapter 5: Reducing road transport emissions and their effects on the highway network (LTP) & South Staffordshire Adopted Core Strategy Core Policy 11: Sustainable Transport

- 2.6 From a local perspective, the Staffordshire LTP encourages the use of sustainable transport and states "For short to medium distance travel, we need to make the least carbon intensive modes-walking, cycling and public transport the most attractive options".
- 2.7 Furthermore South Staffordshire's Adopted Core Strategy seeks to "ensure that accessibility will be improved and transport choice widened, by ensuring that new development is well served by an attractive choice of transport modes, including public transport footpaths and cycle routes to provide alternatives to the use of the private car and promote healthier lifestyles. Development proposals will, either individually or collectively, have to make appropriate provisions for:
 - Widening travel choices and making travel by sustainable means of transport more attractive than the private car;
 - Improving air quality and reducing the impact of travel upon the environment, in particular reducing carbon emissions that contribute to climate change".
- 2.8 This demonstrates consistency with national planning and transport policy aspirations to maximise access to develop via sustainable transport modes, thereby helping to mitigate transport impacts on the network, air quality and the wider environment.



3 Strategy Aim and Objectives

- 3.1 The previous section highlighted that a key objective of both national and local transport policy is to reduce the demand for car travel by promoting alternative, sustainable transport options and widening commuter travel choices. However, without positive measures to actively encourage car drivers to consider and use these alternatives this may be unlikely to occur.
- 3.2 Information, incentives and encouragement needs to be applied to influence how people choose to commute to work. Therefore, the headline aim for the STS is:
 - 'To create an environment for employees that actively promotes a range of sustainable, low carbon travel choices and reduces the overall need to commute to work by car'.
- 3.3 This aim will assist in reducing the overall volume of car journeys to and from WMI whilst supporting the Site's sustainable access options for prospective employees from the outset. This will in turn reduce traffic impacts on the surrounding highway network, to the benefit of reduced congestion, better air quality and improved road safety in the local area.
- 3.4 Measures outlined in this STS will not only bring associated benefits to the individual businesses and their employees at WMI, but will also help to mitigate any transport impacts of the development on the wider local community.
- 3.5 To achieve this aim, the following specific objectives have been derived:
 - Minimise the overall level of single-occupancy car trips associated with commuting to and from the WMI;
 - Minimise the amount of single-occupancy car trips and costs associated with visitor and business travel;
 - Facilitate and encourage the use of sustainable transport options amongst employees and visitors to the Site;
 - Ensure that the differing transport needs of all site users are taken into account as far as practicable;
 - Work in partnership with the local planning and highway authorities, and other key stakeholders, to achieve both Site-specific and area-wide reductions in singleoccupancy car-based commuting; and
 - Continually develop, evaluate and review progress in the strategy's delivery.
- These objectives will work towards achieving the overall aim by bringing forward a package of measures from the outset that focus on promoting access to WMI by sustainable transport options as an attractive and viable alternative to the private car.
- 3.7 This will also specifically influence employee attitudes towards their own travel behaviour by considering sustainable travel alternatives for everyday trips, as opposed to single-occupancy car travel.

4 Forecast Employee Commuting Patterns

4.1 To inform the STS it is necessary to consider, inter alia, who will be the site users, how many journeys are anticipated to and from the Site, where they are anticipated to originate from and at what times of day are the journeys anticipated.



- 4.2 This will ensure that transport infrastructure improvements, sustainable transport service provision, and supporting initiatives are provided where they are most relevant, needed, and will have the most beneficial impact.
- 4.3 Technical Note 14 'Employee Trip Distribution' outlines the agreed forecast employee distributions for the proposed development. The final distribution of employee journeys was determined through use of a gravity model, which considers the relative 'attractiveness' of the proposed development using deterrence factors.
- 4.4 Final proposed employee distributions have been extracted from WSP Technical Note 14 'Employee Trip Distribution' and are presented in Table 4.1 Employee Trip Distributions. These have been agreed with Highways England (HE) and Staffordshire County Council (SCC) and show the highest proportion of employees are forecast to travel from the main urban conurbations local to the Site; notably from within South Staffordshire, Wolverhampton, Cannock Chase and Walsall. Areas located further afield from the development may be less likely to provide significant levels of future workers and therefore associated commutes.

Table 4-1: Employee Trip Distributions

LOCATION	DISTRIBUTION
Wolverhampton	12.08%
South Staffordshire	18.20%
Cannock Chase	8.81%
Walsall	11.38%
Sandwell	8.49%
Birmingham	6.61%
Dudley	2.60%
Telford and Wrekin	6.10%
Lichfield	8.29%
Stafford	5.13%
Stoke on Trent	5.17%
Shropshire	3.66%
East Staffordshire	1.26%
Newcastle under Lyme	1.70%
Staffordshire Moorlands	0.53%
Total	100%

Modal Split for Employee Commuting Journeys

- When determining a base modal split for journeys to WMI it is assumed that the modes of travel will be similar to existing trip patterns from nearby employment areas. To establish the likely modal split for travel modes other than private car, the 2011 Census journey to work statistics for the area south of WMI, South Staffordshire Super Output Area 006, have been obtained. This output area includes the Four Ashes industrial estate and SI Group.
- 4.6 However, consideration has also been given to the anticipated work force and where they will come from. This has particular reference to those who may choose to walk or cycle to WMI and who by proximity, would not necessarily travel significant distances.



- 4.7 Given the above, the future workers who are forecast to walk and cycle to the Site have been identified, by Quod. A walk distance catchment of 2 km has been allowed for in terms of pedestrian journeys to WMI, which is a 25 minute walk for most people. A cycle catchment of 8 km has been allowed for in respect of bicycle journeys, which is a 30 minute journey time based on an average speed of 10 mph. Therefore the modal share figures provided for those travelling on foot or by bicycle reflect the anticipated level of workers who would reside within these catchment areas.
- 4.8 The proposed base travel to work mode share is therefore shown in Table 4-2.

Table 4-2: Baseline WMI Travel to Work Mode Share (Main Mode of Travel)

TRAVEL MODE	MODE SHARE	
Car Driver	83%	
Car Passenger	7.5%	
Bicycle	4%	
Bus	3%	
Train	1%	
Motorcycle	1%	
Walking	0.5%	

- 4.1 Through the delivery of this STS it should be possible to deliver a reduction in the proportion of commuting journeys made as 'car driver' in favour of a modal shift towards more sustainable transport options, coupled with reductions in the overall number of vehicle trips made.
- 4.2 By way of a local area comparison, the i54 Business Park, also situated on the A449 Stafford Road Corridor, has introduced a comprehensive travel plan since occupation. The proportion of single-occupancy car drivers at Jaguar Land Rover fell from 62% during the initial baseline to 56% after two years, suggesting investment in sustainable transport infrastructure, services and promotional initiatives can deliver a clear betterment over the original base year modal split assumptions.
- 4.3 Thus it can reasonably be expected that, through a combination of targeted investment in sustainable transport infrastructure and services, and the implementation of a robust travel plan, an improvement in this base modal share towards a lower proportion of 'car driver' journeys can be achieved at WMI.
- 4.4 Table 4-3 therefore identifies an interim target mode share for WMI, based on a horizon year of 2036, with full implementation of the sustainable transport measures included within this STS and the accompanying Site Wide Travel Plan (SWTP).



Table 4-3: Forecast Modal Split Target (Journeys to Work) at Full Build-out, incorporating Sustainable Transport Package

TRAVEL MODE	TARGET MODE SHARE	PERCENTAGE POINT CHANGE
Car Driver	73%	-10
Car Passenger	12.5%	+5
Bus	8%	+5
Bicycle	4%	0
Train	1%	0
Motorcycle	1%	0
Walking	0.5%	0

- 4.1 Given the anticipated journey distances for the majority of commuting trips and the potential investment in enhanced bus service access to the Site (see Section 5), the interim modal split targets assume a 10 percentage point reduction in 'car driver' mode share and a corresponding 5 percentage point increase in 'car passenger' and 'bus' mode share accordingly.
- 4.2 The 8% target for bus use should be achievable between employees using the enhanced 54 service and the shuttle buses. From an analysis of employee distribution and potential demand for the enhanced Service 54 and shuttle bus service it was considered that the 5% increased bus mode share would be achieved with 2.5% attracted to the public service and 2.5% to the shuttle buses.
- 4.3 The modal share figures for those travelling either on foot or by bicycle is essentially fixed for target setting purposes due to the fact that only a certain number of workers will reside within the specific catchment areas identified.
- 4.4 Furthermore, it should be noted that once WMI becomes occupied it will be possible to survey commuting patterns and thereby ascertain observed empirical data to refine the target modal assumptions. This process will be conducted as a requirement within the accompanyingSWTP, which will provide the mechanism for monitoring and reporting on progress being made towards this modal outcome.

5 Public Transport Strategy

5.1 This section outlines the public transport strategy that forms an important aspect of the wider STS. Prior to presenting the service investment possibilities, this section outlines the existing public transport provision within the vicinity of the Site.

Existing Bus Service Provision

- There are several sets of bus stops within proximity of the Site. To the west, northbound and southbound bus stops are situated on A449 Stafford Road at the A449 Stafford Road / Gravelly Way / Crateford Lane junction.
- 5.3 An additional set of stops are located at the Gailey Roundabout to the northwest of the Site, with the northbound stop situated on the northern A449 arm of the junction and the southbound stop located on the southern arm.
- To the southwest of the Site there is a set of stops located on A449 Station Drive/Four Ashes Road controlled crossroads, both benefitting from stops with a timetable, flag and



pole. The stops outlined above are served by several bus services, as detailed in Table 5.1.

Table 5-1: Bus Services Available from A449 stops in the vicinity of Gravelly Way

SERVICE POLITE		FREQUENCY (MINUTES)			EARLIEST ARRIVAL	LATEST
SERVICE	ROUTE	Weekday	Saturday	Sunday	(TO WMI)	(FROM WMI)
54/54A	Stafford – Penkridge – I54 – Wolverhampton	60	60	-	0559 (Mon- Fri) 0806 (Sat)	1934 (Mon-Sat)

Source: Traveline West Midlands - May2018

- The routes available from the local stops provide a north-south link between Stafford and Wolverhampton passing the western boundary of the Site. Services 54 provides a direct routes north from the Site to Stafford Town Centre, stopping directly outside Stafford Railway Station. The journey time from Stafford Railway Station to the Site on Service 54 is approximately 27 minutes..
- 5.6 To the south, service54 provides a route to Wolverhampton City Centre via the A449 Stafford Road. The service terminates at Wolverhampton Bus Station which is, situated within close proximity of Wolverhampton Railway Station. The route offers a journey time of approximately 29 minutes from the Site to Wolverhampton city centre.
- 5.7 Both Wolverhampton and Stafford Bus Stations provide further onward travel to a large number of destinations over a wider geographical coverage which includes residential areas, increasing the chances of sustainable integrated travel to the Site. Existing public transport services are illustrated in Figure 1.

Existing Bus Services to i54 Business Park

- 5.8 i54 business park is located approximately 8km to the south of WMI at Junction 2 of the M54 Motorway. The business park is presently home to major employers including Jaguar Land Rover and MOOG Aerospace, with circa 3,000 employees presently on site. Bus service provision at i54 has been reviewed to assess whether there is the potential to enhance services for the combined benefit of both i54 and WMI.
- i54 is currently served by a number of bus stops and services which operate within the vicinity of the site. The closest stops to the site are located on Innovation Way and include northbound and southbound stops adjacent to Moog and northbound and southbound stops located approximately 100m from Jaguar Land Rover. The stops above are served by several bus services. Details including frequency and origin/destination are shown in Table 5.2 with details of routes also illustrated in Figure 1.



Table 5-2: Bus Services Available from Moog / Jaguar Land Rover Stops on Innovation Drive

SED/ICE	ROUTE	OPERATOR	STOP	FREQU	ENCY (MINU	JTES)	EARLIEST ARRIVAL	LATEST DEPARTURE
SERVICE	ROUTE	OPERATOR	SERVED	Weekday	Saturday	Sunday	(TO I54)	(FROM I54)
4	I54 - Spring Hill via Wolverhampton	National Express West Midlands	Moog	15	15	60	0621	2309
6	Wolverhampton - Wobaston	National Express West Midlands	Moog	10	10	30	0619	2251
6A	Wolverhampton - Wobaston	National Express West Midlands	Moog	10	25	0	0649	1826
25	Wolverhampton - Pendford	National Express West Midlands	Moog	30	30	0	0705	1727
54/54A	Stafford - Penkridge - I54 - Wolverhampton	National Express West Midlands	Moog and Jaguar Land Rover	60	60	0	0700	1805

Source: Traveline West Midlands – May 2018

5.10 Table 5.2 shows five services operate to and from i54 from a number of locations including Wolverhampton, Stafford, Cannock, Hednesford, Spring Hill, Wobaston and Pendfold. Service frequencies vary between 10 and 60 minutes during weekday peak periods. Frequencies are reduced on Saturday and Sunday for all services

The majority of buses are existing Wolverhampton town services extended to serve i54. With regard to longer distance services the key route is the 54/54A service which . operates past WMI on route to Penkridge and Stafford.

Rail Services

5.11 A comprehensive rail network is available within the vicinity of the Site. Rail services operate between all major destinations in the West Midlands, including Birmingham, Stafford, Wolverhampton and Walsall. A summary of rail services within the West Midlands is shown in Diagram 5.1



Stafford city % zonal rail network Rugeley Trent Valley for West Midlands cities & region WMI site location Lichfield Trent Valley Telford Central connecting lines Midland Metro interchange station station station with limited service rail fare zones Wolverhamptor Tamworth 1 2 3 4 5 Otrain zone 5 tickets also valid in this area Nuneato Northamptor Leamington Spa Worceste ester Shrub Hill Hereford Stratford-upon-Avon

Diagram 5-1: West Midlands Rail Services

Source: London Midlands, May 2017

- 5.12 Near to WMI, three stations have been identified as possible transport interchange points. Penkridge, Cannock and Wolverhampton Stations (located approximately 7km, 8km and 10.5km respectively from the Site) are locations where employees will have the opportunity to switch from rail travel to other sustainable modes such as bus or bicycle to travel to WMI by way of a combined journey.
- 5.13 Penkridge Railway Station is located on the Birmingham branch of the West Coast Main Line (WCML) and is the closest railway station to the Site; located approximately 7km from the Site. Wolverhampton, Stafford, Crewe and Birmingham New Street Railway Stations are all accessible within a 30 minute travel time from Penkridge. Travel times and service frequencies are shown in Table 5.3., which also summarises National Rail services to Penkridge Railway Station.



Table 5-3: Summary of National Rail Services to Penkridge Railway Station

DESTINATION	APPROX. JOURNEY TIME	FREQUENCY	EARLIEST ARRIVAL TO/ LATEST DEPARTURE FROM PENKRIDGE
Birmingham New Street (including stops at Wolverhampton and Coseley)	32 mins	2 per hour during	0630 / 2246
Liverpool Lime Street (including stops at Stafford and Crewe)	67 mins	2 per hour during peak 1 per hour off peak	0630 / 2204

Source: National Rail, May 2018

5.14 In addition to Penkridge, Wolverhampton and Cannock Railway Stations are the other major railway stations within the vicinity of the Site. Tables 5-4 and 5-5 show current levels of service provision from Cannock and Wolverhampton railway stations. Final destinations and a selection of local destinations served by each rail service are shown below.

Table 5-4: Summary of National Rail Services to Cannock Railway Station

DESTINATION	APPROX. JOURNEY TIME	FREQUENCY	EARLIEST ARRIVAL TO/ LATEST DEPARTURE FROM CANNOCK
Birmingham New Street (including stops at Landywood, Bloxwich North, Bloxwich, Walsall)	41 mins	2 per hour	0641/ 2256
Rugeley Trent Valley (including stops at Hednesford and Rugeley Town)	17 mins	2 per hour	0657 / 2256

Source: National Rail, May 2018

Table 5-5: Summary of National Rail Services to Wolverhampton Railway Station

DESTINATION	APPROX. JOURNEY TIME	FREQUENCY	EARLIEST ARRIVAL TO/ LATEST DEPARTURE FROM WOLVERHAMPTON
Birmingham New Street (including stops at Sandwell and Dudley, Tipton and Coseley)	20 mins	9 per hour	0547 / 2318
Birmingham International (including stops at Sandwell and Dudley)	36 mins	4 per hour	0653 / 2245
Walsall (including stops at Cosley, Tipton and Birmingham New Street)	54 mins	4 per hour	0705 / 2220
Shrewsbury (including stops at Wellington, Telford Central and Cosford)	38 mins	2 per hour	0558 / 2244
Stoke-on-Trent (including stops at Stone and Stafford)	33 mins	2 per hour	0638 / 2248
Liverpool Lime Street (including stops at Penkridge, Stafford and Crewe)	82 mins	2 per hour	0758 / 2154

Source: National Rail ,May 2018



- 5.15 Cannock Station is currently served by a total of four trains per hour which operate between Birmingham New Street to the south and Rugeley Trent Valley to the north. A number of local destinations are also served by this line.
- 5.16 As shown in Table 5-5, Wolverhampton has the highest level of service provision from local stations with a maximum of nine services per hour operating between Wolverhampton and Birmingham New Street. It should be noted that some of the service frequencies given above are double-counted due to serving multiple destinations (for example the four services operating to Birmingham International *also* call at Birmingham New Street).
- 5.17 As Wolverhampton has the greatest level of rail provision, directing proposed improvements to public transport services that facilitate interchange with this station is likely to generate the most positive benefit in the context of public transport access to WMI.

Public Transport Enhancement Proposals

Infrastructure and Service Enhancements

- 5.18 This section outlines public transport infrastructure and service improvements which include improvements to existing facilities and services which could serve the development. Proposals are based on the forecast catchment areas of future workers to WMI and are tailored to areas with greatest anticipated demand.
- 5.19 Initial discussions with Staffordshire County Council, Wolverhampton City Council and Transport for West Midlands have indicated an aspiration to improve and maintain existing bus services in the first instance, as opposed to the addition of new services.
- 5.20 Therefore consideration has firstly been given to whether Service 154 to Cannock could be diverted to serve WMI, to serve employees that are forecast to travel from Cannock. Proposals would require an enhanced bus service provision between WMI and Wolverhampton to cater for additional demand and provide an improved frequency.
- 5.21 It is expected however that any modifications to the existing route of Service 154 may result in reduced patronage from existing users by virtue of the resultant increased journey times and would detract from the existing service offer. Therefore the option to divert this service has not at this stage been included in the assessment of potential public transport improvements.

Employee Numbers

- 5.22 It is expected that approximately 8,550 jobs will be supported at WMI. A series of shift patterns are also likely to be adopted over a 24 hour period. It is expected that 30% of employees will work typical office hours. The remaining staff are expected to be split across the following shift patterns.
 - 06:00 to 14:00;
 - 14:00 to 22:00; and
 - 22:00 to 06:00.
- 5.23 70% of staff are anticipated to travel to and from the Site outside regular working hours and therefore outside traditional peak periods of travel demand on the highway and public transport networks. However this also means any public transport service must enable employees to access the Site across all shift patterns.



5.24 Figure 2 illustrates the potential catchment area of employees travelling to WMI. This catchment area has been considered when developing the public transport strategy. As can be seen from Figure 2, the districts with the highest numbers of forecast WMI employees are Wolverhampton, South Staffordshire, Cannock and Walsall.

Proposed Bus Strategy

Improve Existing Public Bus Service Provision (Wolverhampton to WMI)

- 5.25 Based on current circumstances, discussions with Wolverhampton City Council and Staffordshire County Council, and the forecast of employee travel patterns options for potential bus service enhancements associated with the development at WMI can be considered. However, the exact provision will only be decided nearer to occupation and reflect the prevailing circumstances in terms of existing bus services, schedules and patronage. The following section sets out a possible strategy given the current situation.
- 5.26 It is proposed to improve the existing public bus services between Wolverhampton and WMI. These potential improvements could enhance the existing Service 54 to provide a half hourly service between Wolverhampton and the Site, through an extra journey each hour between Wolverhampton and WMI. These proposals do not include any changes to existing school bus services, and consequently are not expected to impact existing service timings, which may currently be utilised by school pupils.
- 5.27 Prior to the construction of the A449/A5 link road the extra journey each hour would enter the Site via the Gailey roundabout and the new WMI entrance on the A5. Once the link road is open, both the extra service and the existing Service 54 would use the link road.
- 5.28 Should demand or aspirations to improve the service frequency between WMI, Penkridge, Stafford or any other destination, the proposals do not preclude this from being implemented in the future.
- 5.29 Figure 3 illustrates the potential public transport improvements to serve WMI.

Introduction of New Shuttle Bus Services

- 5.30 In addition to enhancing the existing Service 54, it is proposed that new shuttle bus services would be provided between the Site and various collection points nominally in Cannock Chase, Walsall and the wider Wolverhampton urban area.
- 5.31 South Staffordshire in general was discounted as an area to be served as its population is relatively dispersed, but it may be advantageous for the shuttle bus to pick up in Penkridge if there is sufficient demand.
- 5.32 The shuttle bus services would be particularly geared to those workers on early and late shifts whose connecting bus service to Service 54 may not operate during these times of day.
- 5.33 Providing a shuttle bus to Cannock Chase, Walsall and the wider Wolverhampton area will serve the areas of highest forecast employee numbers and trip demand.

 Approximately 32% of future workers are forecast to come from these areas. In addition, these areas do consist of specific population centres which lend themselves to being able to provide specific pick up and drop off points for future workers.
- 5.34 Shuttle bus arrivals and departures would coincide with shift patterns and office hours. The buses would require capacity for approximately 20 to 40 passengers. Bus stops would be provided on the A449/A5 Link Road, in the vicinity of the internal roundabout as well as on the Vicarage Road Link Road. These are shown on Figure 4. Provision would be made for bus shelters and waiting facilities.



Summary of Bus Service Provision

- 5.35 Improvements to the frequency of Service 54 would build enhanced connectivity between Wolverhampton Railway Station; a key interchange point within the vicinity of WMI. This service would be supplemented by the shuttle bus services that would operate between WMI and Wolverhampton as well as other areas with a concentration of employees which is forecast to be Walsall and Cannock.
- 5.36 Overall, with the addition of two new vehicles, it is possible to improve the frequency of the existing Service 54 to allow for a half hourly service to operate between Wolverhampton and WMI.
- 5.37 In addition to improvements to the existing service, it is proposed that a shuttle bus service would provide a supplementary service between a number of locations in Wolverhampton, Walsall and Cannock. This service would initially be provided by one vehicle, increasing to three once WMI is fully built out or alternatively with a combination of dedicated employer buses. The routing and introduction of the shuttle buses provided by WMI will be led by the Transport Steering Group.

Public Transport Information and Promotional Activity

- 5.38 To accompany the planned investment in bus service enhancements this STS recognises the need to ensure future employees at WMI see these services as a viable and attractive option for commuting. Furthermore it will be important to maximise patronage on these services from the outset by providing employees with the necessary information and associated incentives.
- 5.39 The following sections summarise initiatives that will be advanced through the Site Wide Travel Plan at WMI to achieve this outcome.

Real-Time Bus Service Information

- 5.40 Providing information to bus users in real-time will allow commuters at WMI to make informed choices about which service to take. Information on schedule adherence and spare capacity can build confidence amongst passengers and avoid unnecessary delay. Options presently include:
 - Live bus arrival and departure screens at bus stops and within reception/canteen areas; and
 - A smartphone application specifically displaying real-time information on bus services at WMI

Bus Information Smartphone Application

- 5.41 A smartphone application to enable employees to determine the next bus arrival and departure in real-time, including information on spare capacity on the service, will add to the quality and confidence in the bus service available. This will mean employees can quickly determine if a scheduled service is due to arrive or depart as planned and if a seat will be available.
- 5.42 The precise specification of the smartphone app will be determined prior to occupation of WMI when it will be possible to review what current functionality and data availability the market has to offer at that time.



Case Study Example: Thames Valley Business Park near Reading is home to circa. 9,000 employees. The park is served by dedicated shuttle bus services providing connections to local urban centres and public transport interchange. The business park has developed a smartphone application that provides real-time journey planning information on the service to the park employees. Available on both iOS and Android, the application has over 2,000 downloads.

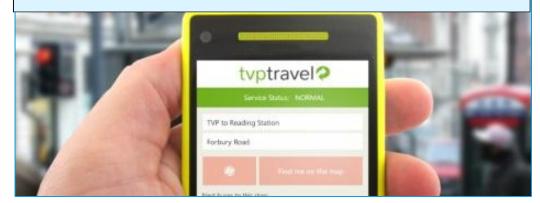


Image: TVP Travel real-time bus information smartphone application (2016).

Bus taster tickets

5.43 Taster tickets for bus services to WMI could be provided to employees free of charge on commencement of their employment. This will allow employees an opportunity to experience travelling to and from the Site using Service 54, or the proposed shuttle service, with a view to forming this commuting habit from the outset.

Employee Discounts

5.44 Special employee discounts with services providers, or for sustainable transport-related purchases, may be secured given the sizable number of employees located at WMI. This might include fare discounts with bus operators, or discounted bicycle or cycling accessory purchases from local retailers.

Case Study Example: In Wokingham, employers signed up with the 'easitNETWORK' can offer their employees 15% discounts on peak-time rail fares with several train operating companies. A discount card is made available and has been taken up by 2,486 employees to date, 16% of whom were previously driving to work by car.

Source: DfT 'What works? Learning from the Local Sustainable Transport Fund' Report (January 2017)

- 5.45 This may include establishing a Sustainable Travel Discount Pass, which all WMI employees can apply for, or forming a partnership with an industry provider that can manage and disseminate such offers to employees at WMI
 - Public Transport Season Ticket Loans
- 5.46 The greatest saving on public transport fares can be achieved by purchasing a long-term season ticket. However, the need for a single advance payment can be prohibitive for some employees, particularly those on lower incomes. By offering an interest free loan,



- employees can realise the financial savings of a season ticket and pay for it over time rather than in advance.
- 5.47 Consequently larger employers at WMI will be encouraged to offer their employees interest free loans to enable them to purchase public transport season tickets.

6 Managing Car-Based Commuting

- This STS recognises that a high proportion of journey to and from the Site will inevitably be made by car, and therefore managing car-based mobility and encouraging higher vehicle occupancy is an important consideration. Reducing single-occupancy car journeys to the Site and encouraging greater levels of car sharing has the potential to reduce the overall volume of car trips to the Site whilst also actively helping to manage the demand for on-site car parking.
- The following measures, also documented in the accompanying SWTP will be introduced to help manage car-based commuting to and from WMI.

Car Sharing Portal

- As organisations take up occupancy at WMI an online car share portal will be created and promoted to employees, providing the mechanism for encouraging car-sharing as a viable means of commuting to WMI by finding potential car sharing partners.
- 6.4 Membership of this portal can continue to grow as the development phases become occupied and as new employees and companies arrive on Site. The overall size of the portal database will then be enhanced, to the collective benefit of all employees looking to find prospective matches.
- This will provide an ideal platform for employees with the same, or very similar, commuting origins to find a suitable car-sharing partner to share their journey to WMI. More car-based journeys will therefore be made with higher vehicle occupancy, in a more efficient manner, and with overall car trips reduced.
- At i54 Business Park, , the introduction of a car sharing scheme has seen significant increases in the proportion of commuting journeys made in this way. At Jaguar Land Rover, from a baseline level of 21% of commutes made by car sharing, the introduction and promotion of car sharing grew to 25% after two years. The proportion of single-occupancy car drivers fell from 62% to 56% over the same period, suggesting car sharing can play a key role on reducing the overall number of car-based vehicle trips.
- 6.7 The benefits of joining the car share portal will be promoted throughout WMI using promotional materials issued to employees through the sustainable travel information packs, internet site and advertising (such as posters) to be located within public areas at each occupying organisation.
- In addition to the above, information and guidance will be provided to car sharers on security, the division of costs without incurring tax penalties, and details of insurance requirements to help facilitate a popular and successful scheme.
- 6.9 Through the SWTP occupiers of larger units, and where dedicated staff car parking is provided, will be encouraged to ensure convenient spaces near to the unit entrance are provided and marked specifically for use by car sharers.

Guaranteed Ride Home Scheme

6.10 Occupiers will also be encouraged to offer a 'guaranteed ride home' for their employees who participate in any car-sharing arrangement. Under the guaranteed ride home



- scheme, if a member of staff has to leave at an unexpected time for emergency reasons and no practical alternative travel option is available, the organisation will provide the means for ensuring that this person gets home.
- 6.11 This may take the form of covering the cost of a taxi for that employee. The 'guaranteed ride home' scheme will also help appease any concerns amongst employees should their car sharing arrangements fail for any reason, ensuring they are able to travel home.

Financial Incentives

- 6.12 Financial incentives represent another option for the promotion of efficient car use and car sharing. Financial incentives such as 'cash-out' schemes might be offered to employees who car share, or entry to a prize draw for all members of the car share database. These cash-out and prize schemes can of course be extended to cover those who travel to work by other sustainable means, such as walking and cycling.
- 6.13 The potential for introducing these schemes with individual occupiers will be taken forward through the SWTP for WMI.

Company Car Policy

- 6.14 Larger occupiers who anticipate offering company cars to employees as part of their remuneration will be encouraged to also offer a financial alternative. This will in turn encourage employees that are entitled to a company car to consider such an alternative as opposed to taking up the use of an additional car.
- 6.15 The larger occupiers will also be encouraged to consider their company fleet car policy. This will include considering introducing more fuel efficient, alternative fuel, or low emission pool cars and fleet vehicles. This will further help to reduce the impact of carbased vehicles on the local environment.

7 Promoting Active Travel

7.1 Details of the existing infrastructure available to reach WMI when travelling on foot and by bicycle are set out in this section. Proposed improvements to the network are then presented, to be delivered by the development to enhance opportunities to reach WMI by these modes.

Existing Facilities and Modal Catchments

- 7.2 Opportunities to reach the Site from five principal routes are set out below. These routes are via the A449, A5, Station Drive/Vicarage Road, the Staffordshire and Worcestershire Canal and Straight Mile. These key routes are illustrated on Figure 5.
- 7.3 Figure 6 indicates the existing cycle network that currently serves the area. This includes segregated off-carriageway facilities, marked on-carriageway facilities and advisory routes.
- 7.4 From a general perspective, it should be noted that the area surrounding the Site benefits from relatively flat topography which should encourage those wishing to travel to the Site on foot or by bicycle. This would suggest that there should be a greater propensity of take up of travel by these active modes to WMI than at a location which has a more undulating topography.
- 7.5 Figure 7 provides the pedestrian catchment from the site, which extends to a distance of 2km. Although residences surrounding the Site are limited in number, dwellings located at Standeford, Four Ashes and adjacent to the Gailey Roundabout would fall within the 2km catchment.



7.6 Figure 8 provides the cycle catchment of the Site, which extends to a distance of 8km and Table 7.1 highlights the settlements within the catchment, based upon an average speed of 10mph. It can be seen that although the catchment for walking is fairly limited, the cycle catchment areas covers a significant population.

Table 7-1: Cycle Duration to Site

SETTLEMENT	TIME
Crateford, Four Ashes, Standeford	0-10 minutes
Coven, Brewood, South Penkridge	10-20 minutes
Cannock, North Penkridge, Featherstone, Cheslyn Hay	20-30 minutes

7.7 The existing pedestrian and cycle facilities for the five principal access routes are described below.

Route 1 - A449

- 7.8 Currently there is a segregated shared cycle / footway route provided adjacent to both the western and eastern sides of the A449. This route has recently been improved and is provided at a width of 1.5 metres. These routes provide access to the Site from Wolverhampton and Coven to the south and Penkridge to the north. Street lighting is provided along this section of the A449, which within Penkridge is overlooked by residential housing, providing natural surveillance of this element of the route.
- 7.9 It is possible to cycle to and from Penkridge Railway Station using this cycle route as shown on Figure 5. The route also facilitates an interchange with public transport located around 7km from the Site.
- 7.10 Pedestrian crossing facilities are present at the signal controlled junction of A449/Station Drive.

Route 2 - A5

7.11 There is an existing footway adjacent to the northern side of the A5 and along the section between the A449 Gailey Roundabout and M6 Junction 12. This allows connections to be made between the Site and Penkridge to the north west.

Route 3 - Station Drive / Station Road / Vicarage Road

7.12 Station Drive/Station Road/Vicarage Road has footway facilities from its junction with A449 to the canal bridge; a distance of approximately 930 metres. Street lighting is present along Station Road between the crossing of the canal and the junction with the A449 to the west. Station Road is also overlooked by a mix of residential and industrial properties providing some natural surveillance of the route.

Route 4 - Staffordshire & Worcestershire Canal

- 7.13 As shown on Figure 5, the Staffordshire and Worcestershire canal passes through the western part of the Site. It enters the Site to the north at Gailey Marina where there is a lock and various facilities including toilets. The canal exits the Site to the south where it passes beneath Vicarage Road. It is also possible to exit the canal in the vicinity of the existing bridge with Gravelly Way within the Site. Generally, use of the canal as a route to the Site would be expected during day light hours.
- 7.14 There is a towpath for pedestrians and cyclists along the length of the canal. This is classified as a Sustrans local off-road route.



7.15 The canal connects to the Shropshire Union canal as it heads further south towards Wolverhampton. To the north it heads towards Stafford via Penkridge.

Route 5 - Straight Mile to the East

- 7.16 As can be seen from Figure 6, there are significant existing advisory cycle routes within the area to the east of the WMI Site. These cycle routes do not provide designated cycle facilities but are classified by Staffordshire County Council as routes that are suitable for cycling due to lower traffic volumes. They provide the potential for a more enjoyable environment for cyclists as opposed to facilities provided adjacent to routes that experience higher traffic volumes which may be unattractive to some people.
- 7.17 In terms of the available facilities in the vicinity of the Site, Straight Mile is designated as an advisory cycle route. This connects to Four Crosses Lane to the north east and ultimately to the A5 to the east of M6 Junction 12.
- 7.18 Further advisory cycle routes are provided to the north of the A5 which then provide routes towards Cannock itself including to its railway station. These advisory cycle routes are located away from the A5 which does not have designated cycle facilities along the section that runs between M6 Junction 12 and Cannock. It is therefore possible to cycle to and from the Site to Cannock Railway Station using the cycle routes described above; a distance of around 8km.

Active Travel Strategy

- 7.19 Given the catchment areas and principal routes described, the proposed active travel strategy for WMI is set out in this section.
- 7.20 It is important to recognise that improvements to the existing pedestrian and cycle infrastructure will also be available for use by members of the wider public and will therefore offer betterment to the existing facilities available within the general area surrounding the Site.
- 7.21 To improve the main pedestrian and cycle route connections to WMI the following improvements are proposed:
 - Upgrade the existing shared use cycle/footway to a 3metre wide shared cycleway/footway to the east of A449 between Gailey Roundabout and the junction with Station Drive to the south;
 - Provide pedestrian crossing facilities at the proposed A449 Site access roundabout to facilitate access to bus facilities to the west;
 - Upgrade existing footway to the west of the A449 in the vicinity of the proposed Site access roundabout to provide a width of 2 metres;
 - Alter the existing footway adjacent to the north of the A5 to provide where feasible a
 3m wide shared cycleway/footway. This will be introduced along the A5 between
 Gailey Roundabout and the proposed Site access from the north. It is not possible to
 provide a full 3metre width along the entirety of this route given the existing railway
 bridge and due to the limited land availability in certain areas further to the east. The
 proposed roundabout junction with the A5 will also incorporate suitable crossing
 facilities into the Site:
 - Provision of a new footway from the A5 access roundabout to towards the Gailey Marina.
 - Alterations to the access with Avenue Cottages with the A5 providing a median to prevent right turn movements



- A Canal Enhancement Scheme will relate to the section of the canal which is located within the WMI Order Limits The scheme will include improvement and mitigation measures such as: -
- Resurfacing of the towpath with a suitable bound/compacted gravel surface (eg Breedon gravel type) to provide an appropriate surface capable of dealing with an increased level of use where needed for connectivity to the footpath routes.
- Two new pedestrian connections to the towpath from the Croft Lane Community Park permissive paths with pedestrian access points at the A5, Hoppe Roundabout and Station Road would be improved.
- The introduction of wayfinding and information signage in appropriate locations along the canal and, in particular, at the access points. The signage would identify routes and provide information on local heritage, ecology and points of interest.

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- Provide pedestrian crossing facilities at the new four arm Site access roundabout junction with Vicarage Road;
- Provision of a new cycleway adjacent to Vicarage Road within the Site.
- Provide pedestrian crossing facilities along Straight Mile in order to connect to permissive paths which are being proposed as part of the development; and
- Provide new footways at the junctions of Straight Mile / Kings Road / Woodlands Lane.
- 7.22 Details of the location of these potential improvements are provided on Figure 4.

On-Site Provision

- 7.23 Within the WMI Site itself high quality provision will be made to accommodate those travelling on foot or by bicycle.
- As shown on Figure 4, the development proposes a route through the Site that connects the proposed A5 access to the proposed A449 access to the south west. (The A449/A5 Link Road) This route will take the form of an adopted road which would be available for use by public traffic. To the south east, a route (The Vicarage Road Link) would also be available for Site traffic towards Vicarage Road and the development provided to the east. This road would not be adopted.
- 7.25 From the west shared use cycle / footways will be provided adjacent to both sides of the carriageway on the A449/A5 Link Road and would be available for a distance of some 200m after which the cycle / footway would be provided to the north of this route. Regular crossing points by way of crossing refuges would be available to ensure access to development plots can be provided for pedestrians and cyclists.
- 7.26 From the proposed A5 access from the north, a 3metre shared-use cycleway/footway would be provided adjacent to the northbound carriageway of the internal road. This route would connect to the proposed shared use cycle/footway provided adjacent to the access from the A449. Crossing points will be provided at the internal roundabout which would then connect to 3 metres shared use cycle/footways provided adjacent to both sides of the internal road connecting to Vicarage Road.
- 7.27 Shared-use cycle/footways will join the proposed roundabout access with Vicarage Road and will allow access to the further development area to the east via the pedestrian crossing facilities provided.
- 7.28 All buildings within the development would provide changing facilities for staff who may wish to travel to the Site by bicycle or other active means. It is proposed that these



changing facilities would provide showers, secure storage facilities and areas for drying clothing. Secure, covered cycle parking would also be provided by the proposals.

Future Pedestrian and Cycle Routes to the Site

- 7.29 Proposed cycling and walking improvements on a number of routes to reach the Site will become available through the development proposal. These routes are considered in further detail below;
 - A449: Along the section of the A449 between the Gailey Roundabout and Station
 Drive frontage a proposed cycleway/footway will connect into the existing facilities
 that are present to the north and south. This route would accommodate access to the
 Site from Penkridge to the north, Coven and Brewood from the south and for some
 workers from Wolverhampton;
 - A5: a new shared-use cycleway/footway will provide connections from Gailey Roundabout to the main Site access with the A5. This route will facilitate those future workers arriving from Penkridge, including the railway station;
 - Station Drive/Station Road/Vicarage Road: The provision of a shared-use cycleway/footway along the section of Vicarage Road will provide linkages from the west to the south-eastern aspect of the Site for cyclists and allow connections to the permissive paths to the south. . The Vicarage Road route will also connect to the existing advisory cycle routes from Cannock and the east, particularly along Straight Mile. This connection will afford those workers travelling from this direction with the opportunity to access the main part of the Site via the access junction with Vicarage Road, as well as the south eastern section of WMI; and
 - Widening and resurfacing along the canal towpath, to afford alternative quiet connections between Station Road and for those wishing to travel from further afield.
- 7.30 In addition, the on-site roads, which will provide for movement by pedestrians and cyclists, will be supplemented by a network of permissive paths, which will provide access between the Croft Lane Community Park and the towpath. New wayfinding and signage will be provided along the Canal, along with resufacuing of the towpath when needed for connecitvut to footpath routes. fro accessible.
- 7.31 Overall, a full and comprehensive network of pedestrian and cycle infrastructure will be delivered to ensure sufficient provision is available to accommodate journeys by these modes. These facilities will connect with existing areas of population surrounding the Site to ensure travelling either on foot or by bicycle is an attractive proposition for those future workers who reside within 2km and 8km respectively, or who may alternatively wish to travel by bicycle from the railway stations at Penkridge and Cannock by way of a combined journey.

8 Reducing Travel Demand

- 8.1 The STS to this point has primarily focussed on means to manage travel demand and actively promote sustainable transport options as viable alternatives to single-occupancy car journeys for access to and from the Site.
- 8.2 However, reducing the overall need to travel is also an important aspect of this strategy, with real potential to reduce both the volume of trips made during periods of peak travel demand on the network, and overall.
- 8.3 From Section 3 it is estimated that approximately 30% of employees are anticipated to be office based and working traditional office hours. This suggests the nature of their employment may be conducive to flexible and remote working options being made available by their employers. Consequently this STS will also actively take forward the following to maximise their potential application.



Staggered Working Hours

- 8.4 Staggered hours policies allow employees, by way of an agreement with their employer, to work a structured shift pattern different to other employees. In some circumstances employees may work shift patterns unique to them. In most circumstances this will mean groups of employees, or departments work one of several shift patterns.
- 8.5 Although the majority of employees that will be based at WMI are anticipated to work against a shift pattern, employers will be encouraged to examine the potential to introduce staggered working times for at least a proportion of office-based staff. This will include covering those staff provisionally anticipated to work 09:00-17:00. This will mean staggering arrival and departure times, where operational requirements permit, to lessen the concentration of employees arriving and departing the site during a narrow time period such as arriving shortly before 09:00 and departing shortly after 17:00.
- 8.6 This will serve to help spread the concentration of vehicle arrivals and departures on the surrounding network, reducing any associated congestion and journey time delay that may otherwise arise.

Remote / Home Working

8.7 Individual occupiers will also be encouraged to consider remote working options, such as permitting some staff to work from home for at least part of the week. This will involve assessing whether it is practically possible for employees to work from home and whether the organisation uses technology to make this viable.

Flexible Working Hours

- 8.8 Flexible working hours allows employees to fit their working hours around their individual needs, and accommodate other commitments outside of work. They do this by communicating with their employer to create an adaptable work schedule. In most circumstances all employees working flexitime in a particular organisation will work the same number of hours as those working ordinary shifts only they may or can change the hours they work each day, week or month.
- 8.9 Most flexi-time policies feature one of the following measures, each of which are aimed at ensuring employees continue to deliver a certain level of input or service beyond each hour of everyday:
 - Core hours during which all employees must be in the office (e.g. 10:00-16:00)
 - Annualised or monthly hours where an employee is expected to work a certain number of hours per month or year, but is not necessarily required to work specific pre-defined hours in the day.
- 8.10 This has the potential to significantly reduce vehicle arrival and departures around the traditional network peaks, as a proportion of employees decide to, for example, arrive later and finish later allowing travel outside of these periods. Furthermore this flexibility can mean those wishing to travel by public transport are not deterred by small conflicts between when these services operate and when they are required to commence work. Where such conflicts do occur, and cannot be resolved, this may otherwise lead to a higher level of car dependency as employees deem private car travel the only viable option.
- 8.11 A compressed working week is another flexible option where an employee works his/her full-time hours (such as 40 hours) in fewer than five days per week. Typical examples are:
 - Four 10-hour days; or



- Three 12-hour days; or
- Nine hour days Monday through Thursday, an 8-hour day on one Friday, with alternate Fridays off
- 8.12 This can result in reducing the overall number of trips made to and from a workplace as a proportion of staff compress their working time into a shorter period. Therefore where operational requirements permit, employers at WMI will be encouraged to examine the potential for flexible working hours amongst employees.

9 Conclusion

- 9.1 This Technical Note details a comprehensive Sustainable Transport Strategy for WMI, in support of key planning and transport policy objective to mitigate development impacts on the transport network, local communities and wider environment, and to encourage access to and from the Site by sustainable transport modes.
- 9.2 Furthermore the strategy outlines approaches to reduce overall travel demand, especially by private car and during peak travel periods on the transport network, based on recognised industry best practice and in a manner conducive with the planned Site operations.

Policy Accordance

9.3 Table 9-1 overleaf provides confirmation that the proposed Sustainable Transport Strategy is in accordance with the relevant National and Local Transport Policy.



Table 9-1: Summary of Relevant Transport Policy

Policy Document	Policy Objective	Policy Accordance / Compliance
National Policy Statement for National Networks (NPS)	Providing people with options to choose sustainable modes and making door-to-door journeys by sustainable means an attractive and convenient option	Provision of active travel infrastructure to accommodate journeys to the development on foot and by bicycle together with public transport strategy that will serve the forecast worker catchment of the scheme and provides interchange opportunities.
	Applicants to use reasonable endeavours to address the needs of cyclists and pedestrians in the design of new schemes.	Provision of new pedestrian and cycle infrastructure along Vicarage Road together with improvements to existing facilities adjacent to the A449 and A5. Provision of suitable on-site facilities to accommodate journeys by these modes.
National Planning Policy Framework	Focus significant development in locations which are or can be made sustainable	Through the provision of improvements to pedestrian and cycle infrastructure and improvements to bus networks, the development can be made sustainable from the transport perspective providing connections to existing public transport interchanges and worker catchment areas. Provision of onsite facilities such as storage lockers, showers and parking will make travel by active modes a viable proposition. Extensive measures to also reduce overall travel demands by single-occupancy car.
	Safe and suitable access to the site can be achieved for all people	Through the provision of cycle / pedestrian infrastructure, including crossing facilities of existing and proposed highways, safe access will be provided for all modes of travel to the Site.
Staffordshire Local Transport Plan: Chapter 5: Reducing road transport emissions and their effects on the highway network For short to medium distance travel, the least carbon intensive modes-walking, cycling and public transport should be the most attractive options		Improvements to existing bus, cycle and pedestrian facilities, complimented by the provision of new infrastructure will make travel to the development by these modes a real option for those living a short to medium distances from the Site. Extensive measures to also reduce overall single-occupancy car journeys.
South Staffordshire Adopted Core Strategy Core Policy 11: Sustainable Transport	Accessibility will be improved and transport choice widened, by ensuring that new development is well served by an attractive choice of transport modes	Improvements are proposed to bus, cycle and pedestrian infrastructure which will widen the choice of mode of travel to the development. Enhanced existing bus service and new shuttle bus service to be provided. Car sharing scheme to be introduced and promoted.



FIGURES

