

REPORT N° 1

THAMES VALLEY PARK PARK AND RIDE

OPTIONS APPRAISAL

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THAMES VALLEY PARK PARK AND RIDE

OPTION APPRAISAL

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1 INTRODUCTION

1.1 CONTEXT

- 1.1.1 WSP | Parsons Brinckerhoff has been commissioned by Wokingham Borough Council (WBC) to provide transport consultancy services to support a planning application and the Transport Business Case for funding towards a new Park and Ride within the borough. Funding for the scheme has been allocated from the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP).
- 1.1.2 The TVB LEP believes in 'collaborative momentum by bringing together business, unitary authorities, education and the community sector to drive the local economy to new levels of growth.' The Park and Ride is therefore a useful initiative to help grow Wokingham and Reading's economy.

1.2 BACKGROUND

- 1.2.1 The Park and Ride project will help to improve access to Reading along the A4 corridor. This improved access by public transport will help to reduce congestion and support economic growth.
- 1.2.2 Furthermore, between now and 2026 Wokingham Borough is set to deliver 13,000 new homes, of which 4,450 are located surrounding the A329 corridor in Winnersh (450 units), North Wokingham (1,500) and South Wokingham (2,500). The Park and Ride will support this growth by providing additional public transport capacity into central Reading to accommodate the increased usage.
- 1.2.3 The objectives of the scheme are:
- à To support the forecast housing growth of 13,000 units by 2026 in Wokingham Borough;
 - à To reduce congestion on the A4 corridor;
 - à To encourage car drivers to access central Reading using public transport; and
 - à To support other Park and Rides, including Winnersh Triangle Park and Ride.

- 1.2.4 The proposed park and ride site is part of a wider national and local commitment to improve the transport network and to reduce congestion at constrained locations. It has been identified that Reading requires a reduction in congestion levels to enhance the areas economic productivity. As a result, Reading and Wokingham Borough Council's have already implemented a range of schemes to reduce congestion on particularly congested links on the road network. These schemes have included the MereOak Park and Ride on the A33, the Winnersh Park and Ride on Wharfedale Road, the Ready Bike Hire Scheme, a pedestrian / cycle bridge and the regeneration of Reading Railway Station. These schemes have had considerable success in alleviating congestion in constrained areas and encouraging people to use more sustainable modes of transport.
- 1.2.5 By reducing congestion and improving connectivity, the scheme will help support a mode change from single occupancy car journeys to bus travel.

1.3 PURPOSE OF THE REPORT

- 1.3.1 The purpose of the report is to set out the strategic case for the proposed park and ride, including the process of identifying the need for the interventions and process of options development and selection that has informed the decision to proceed with the park and ride scheme. This report is structured as follows:
- à Strategic context: provides the rationale for the scheme;
 - à Strategic option appraisal: details option development, sifting and strategic appraisals: and
 - à Summary and conclusions: provides a summary of the key points identified within this report.

2 STRATEGIC CONTEXT

2.1 INTRODUCTION

2.1.1 This chapter details the strategic context behind the rationale for Thames Valley Park Park and Ride. It describes existing park and ride facilities within the borough, and sets out the policy aspirations which the scheme will support.

2.2 EXISTING SITUATION

2.2.1 The A4 London Road has been identified as the main route for vehicles travelling to Reading town centre from the east, and for links from Junction 10 of the M4. There is a particular pinch point along the route at the intersection of the A4 and A329, which is known locally as Cemetery Junction. East of this junction the corridor has two narrow lanes westbound and a single narrow lane eastbound.

2.2.2 The corridor supports 75,000 people movements per day and in 2014 experienced average daily traffic flows of approximately 22,500 vehicles. The route is heavily constrained and subject to frequent congestion. A reduction in traffic levels at peak times is required.

2.2.3 Public transport along the A4 London Road between A4/A3290 junctions comprises:

- à Park and Ride from Winnersh Triangle;
- à TVP Shuttle bus, which operates between Reading train station and Thames Valley Business Park; and
- à Services 13, 14, 126, 127, 128, 129 and 850.

§ The frequency of these services is provided in Table 2-1.

Table 2-1 - Service Frequencies

BUS SERVICES	FREQUENCY		
	AM (07:00-10:00)	IP (10:00-16:00)	PM (16:00-19:00)
Winnersh Park and Ride Service	Every 15 mins	Every 15 mins	Every 15 – 20 mins
TVP Shuttle Bus	Every 6-10 mins	Every 15-30 mins	Every 6-10 mins
Service 13	Every 20-30 mins	Every 30 mins	Every 20-30 mins
Service 14	Every 20-30 mins	Every 30 mins	Every 20-30 mins
Service 126-129	Every 30 mins	Every hour	Every 30-60 mins
Service 850	Every 30-50 mins	Every 20-40 mins	Every 20-50 mins

HOUSING GROWTH

- 2.2.4 The projected growth in housing across the Thames Valley requires greater investment in park and ride facilities to reduce pressures on the local road network.
- 2.2.5 There are 13,000 new homes are set to be delivered and four communities expanded. While not all of this growth is directly on the A329 corridor. Over 4,450 new homes are allocated in Wokingham Borough, with 1,500 in North Wokingham, 2,500 in South Wokingham and 450 in Winnersh. The town centre area is also expected to see new development with a mixture of new homes and increased retail.
- 2.2.6 A further 5,210 are proposed in Reading by 2026. The proposed park and ride would improve accessibility from the east into central Reading.

SOCIO-ECONOMIC CHARACTERISTICS OF THE STUDY AREA

- 2.2.7 At the time of the 2011 Census, Wokingham and Reading boroughs had populations of 154,380 and 155,698, respectively. The socio-economic analysis of the area will be based upon 2011 Census data for Wokingham Borough. Key statistics for the area include:
- à The borough has the highest level of average car ownership out of all Unitary Authorities in England, with 1.64 cars per household. Certain Middle Super Output Areas (MSOA) in the borough have car ownership levels of 1.98;
 - à Approximately 70% of the borough's population is economically active;
 - à Across the borough, 73% of people travel to work by car, however it is as high as 82% in some MSOAs; and
 - à Over 8% of people living in Wokingham travel to work in central Reading, 43% of which drive to work.

2.3 GROWTH AND POLICY ASPIRATIONS

- 2.3.1 This section outlines the links between the proposed park and ride and local authorities transport policy aspirations', and projected growth patterns.

LINKS TO LOCAL POLICY

- 2.3.2 The proposed park and ride is key to achieving the local authorities' transport policy aspirations. A summary of the policy aspirations' and key policy links for Reading Borough Council and Wokingham Borough Council are provided in Appendix A. The key elements are summarised below:
- à To enhance the economic viability of town centres;
 - à To reduce congestion;
 - à To promote sustainable travel;
 - à To work with neighbouring authorities to deliver an enhanced interurban public transport network; and
 - à To work with the private sector to innovate and secure delivery of integrated transport choices associated with new developments.

2.4 WITHOUT SCHEME CASE AND ANTICIPATED OUTCOMES

WITHOUT SCHEME

2.4.1 Without the introduction of the measures proposed by the park and ride scheme, congestion along the A4 will remain high at peak periods, and will become intensified by future traffic growth from Strategic Development Locations and employment areas.

2.4.2 Specific outcomes of a 'Do Nothing' scenario include:

- à The economic future of Reading will not be as competitive for private sector businesses as other boroughs;
- à Increased congestion and noise along the A4 and A329 will affect commuting, educational and leisure trips;
- à Increased congestion and noise along the A4 and A329 will affect local residents' quality of life; and
- à There will be further reductions in air quality, particularly along the A4 which is a designated Air Quality Management Area (AQMA) for Reading.

2.5 SUMMARY

2.5.1 This chapter has described the strategic context of the proposed park and ride. The key points and findings are summarised below:

- à The scheme is key to helping the local authority to meet their sustainable transport policies, aspirations, in particular and aim to reduce the number of single occupancy car journeys; and
- à The route will increase accessibility into Reading from the east by reducing congestion along the A4 and A329 corridor.

3 STRATEGIC OPTION APPRAISAL

3.1 INTRODUCTION

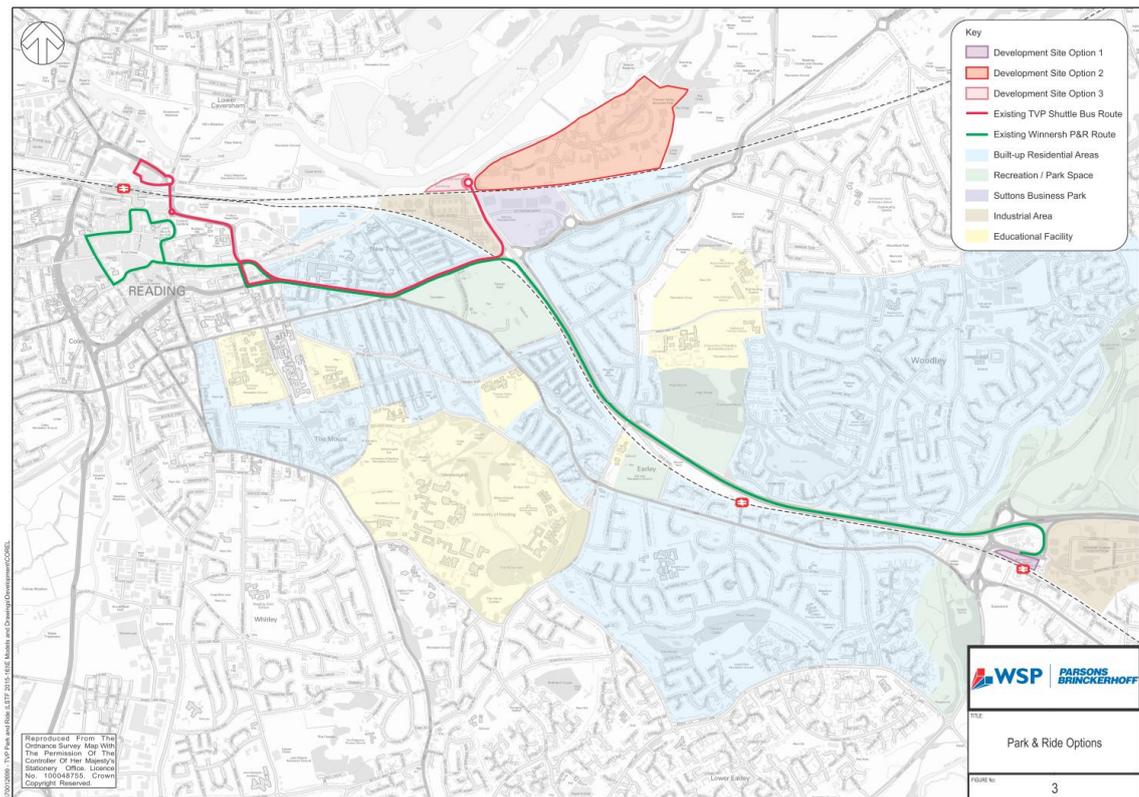
3.1.1 Expanding on research of existing vehicular movements along with A4 and A329 corridors towards Reading and locations of existing park and ride facilities within the borough. This chapter details various options developed having considered the context given in Chapter 2. This chapter also presents the options sifting and strategic appraisals.

3.2 OPTION DEVELOPMENT

3.2.1 The options developed for each possible park and ride location are set out below. These have been developed in consideration of the context detailed within Chapter 2. Options not to be taken forward in for the Business Case are then rejected with appropriate justification in Section 3.3.

3.2.2 Three options have been identified as described below and shown on Figure 3-1

Figure 3-1 - Option Locations



OPTION 1 EXPANSION OF EXISTING PARK AND RIDE AT WINNERSH TRIANGLE

3.2.3 Winnersh Triangle park and ride currently provides approximately 400 parking spaces, and is located to the north of Winnersh Triangle Rail Station. The Winnersh Triangle park and ride bus is operated by Reading Buses with services departing every 15 minutes between 7am and 7pm to Reading town centre.

3.2.4 It is proposed that the existing park and ride can be expanded to cater for additional demand by adding another tier to the car park. Frequency of existing park and ride bus services may increase to cater for additional demand generated at the site.

Benefits

3.2.5 Utilises existing park and ride bus service which uses dedicated bus lanes along the A329 to improve journey times.

Issues

3.2.6 Expanding the existing park and ride would require another tier to be added to the car park, increase the visual intrusion of the site. Furthermore, expansion would fail to serve the potential new user market along the A4 corridor. For some potential users drivers would have to drive away from Reading to use the park and ride, which may put some drivers off using this option.

OPTION 2 DEVELOPMENT OF A NEW PARK AND RIDE

3.2.7 The proposed location of a new park and ride is a triangular, wedge shaped section of land; approximately 1.35ha, south of the River Thames and west of the Thames Valley Business Park. The facility would be served by the existing Thames Valley Park shuttle bus service which operates between the business park and Reading town centre. Currently this service operates empty towards central Reading in the morning and towards TVP in the evening. The proposals would therefore utilise the shuttle's spare capacity.

Benefits

3.2.8 Utilise the existing TVP shuttle bus service which currently operates empty towards Reading town centre in the morning and towards TVP in the evening. The location is likely to attract further customers from the A4 corridor as the proposed location is approximately a 3 minute drive from the A4.

Issues

3.2.9 Proposed development would be built on previously undeveloped land, would require planning approval, feasibility and design work.

OPTION 3 USE OF SPARE CAPACITY WITHIN TVP CAR PARKS

3.2.10 The proposed development would utilise existing spare capacity within car parks available for employees and visitors of TVP to be used as a park and ride facility. Similarly to Option 2 proposals would utilise the existing TVP shuttle bus which operates between the business park and Reading town centre. Spare capacity on the shuttle buses would be utilised as the bus currently operates empty towards Reading town centre in the morning and towards TVP in the evening.

Benefits

- 3.2.11 The proposed development would utilise spare capacity from the existing TVP shuttle bus, removing the necessity to launch a new park and ride bus service. The location is likely to attract further customers from the A4 corridor as the proposed location is approximately a 5 minute drive from the A4.

Issues

- 3.2.12 Less direct when compared to Option 2 due to uncertainty when looking for a space, by utilising spare capacity within TVP car parks no allocated spaces are available for customers, potentially increasing time spent looking for an available space and consequently reducing the attractiveness of the service. Car parks are private. There could be security issues with members of the public wandering around the TVP site.

3.3 OPTION SIFTING

- 3.3.1 A subjective appraisal of each of the options against challenges identified by Wokingham Borough and Reading Borough Council, as well as against deliverability and stakeholder support, has been undertaken. The output of this appraisal is provides in Table 3-1. This has enabled the lower scoring options to be sifted out of the final selection. The resultant scheme is highlighted on the table below.

Table 3-1 - Option Sifting

Option	Description	Benefits / Issues									Score*
		Challenges Identified by Wokingham				Challenges Identified by Reading					
		Support Economic Growth	Tackling Climate Change	Promoting Equality of Opportunity	Contributing to Better Safety, Security and Health	Improving Quality of Life and a Healthy Natural Environment	Network Efficiency	Future Development Proposals	Public Transport Accessibility	Park and Ride Provision	
1	Expanding Winnersh Triangle Park and Ride	✓✓✓	✓✓	✓✓	✓✓✓	✓✓✓	✓✓	xx	✓	✓✓	16
2	Development of new Park and Ride on land to the west of TVP	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	25
3	Use of spare capacity within existing TVP car parks	xxx	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓	xx	✓✓	xxx	8

*Scale of 1 to 3 - 3 being most positive or negative (each tick = 1 / each cross = -1). Total possible score 27

- 3.3.2 Option 2 – Development of a new park and ride to the west of TVP Park and Ride presents the strongest case in terms of attracting drivers from both the A4 and A329 Corridors. The scheme provides the most direct route into Reading town centre by utilising the existing TVP shuttle bus service which currently operates empty in the morning between TVP and Reading and in the evening between Reading and TVP.

3.4 STRATEGIC APPRAISAL

- 3.4.1 The possible locations for the proposed park and ride, have been developed having full regard for growth agendas for housing and employment within Wokingham Borough, enhancing urban connectivity and improving air quality within Reading and Wokingham borough's. Consultation regarding the scheme options has also been undertaken to ensure that the chosen option meets the aspirations and expectations of key stakeholders and the local authority.

- 3.4.2 As such the defined scheme addresses user needs and requirements, as well as supporting the strategic aspirations of:

- à **Economic growth:** enhancing the economic viability of town centres by providing additional public transport capacity between Reading and Wokingham, providing facilities to support commuting

- à **Smarter travel:** by providing an opportunity for Wokingham residents to consider incorporating the use of a park and ride into their journeys when travelling to work by car.
- à **Health and Wellbeing:** providing a new park and ride will help support existing, as well as new users of park and rides. Increased levels of usage will help to free up road space to reduce congestion, a reduction in the number of vehicles will also reduce the chance of accidents and improve local air quality.

4 SUMMARY AND CONCLUSION

4.1 SUMMARY

4.1.1 This Options Appraisal Report has described the development of a new park and ride within Wokingham borough, which would act as an alternative travel choice for residents that access Reading town centre by the A4 and A329 Corridors.

4.1.2 The proposals for a new park and ride within Wokingham borough is supported by key stakeholders and provides the following benefits:

- à Support the forecast housing growth of 13,000 units by 2026 in Wokingham Borough;
- à Reduce congestion on the A4 corridor;
- à Encourage car drivers to access central Reading using public transport, supporting mode change from single occupancy car journeys to bus travel

4.2 CONCLUSION

4.2.1 The proposed park and ride provides further opportunities to improve accessibility to Reading town centre via non-car modes, ensure that infrastructure is adequate to support housing development in the surrounding area. The proposal offers the opportunity to utilise existing park and ride and TVP shuttle bus facilities, reducing the necessity to launch a new bus service and assisting in supporting existing services

4.2.2 The options sifting process and appraisal has shown that the resultant scheme has provided the strongest case for addressing key policy aspirations for supporting growth agendas, by providing alternative access arrangements to single occupancy car journeys, as well as health and wellbeing aspirations. The scheme will address the lack of access to park and ride from the A4, in turn reducing congestion along the A4 and A329 Corridors into Reading.

4.2.3 For these reasons, the proposed scheme is considered worthy of proceeding to Full Business Case.

Appendix A

POLICY CONTEXT

POLICY CONTEXT FOR SCHEME DELIVERY

The TVP Park and Ride has been identified in a number of local and regional policy documents as a key scheme to be brought forward. The scheme is included in the following policies and plans:

- à Thames Valley Berkshire LEP Strategic Economic Plan;
- à Revoked South East Plan;
- à Reading Borough Council's Core Strategy;
- à Reading Borough Council's Local Transport Plan;
- à Wokingham Borough Council's Core Strategy; and
- à Wokingham Borough Council's Local Transport Plan 3.

This chapter outlines the strategic case for the TVP Park and Ride and how the facility fits into current national, regional and local policies and aspirations.

BUSINESS STRATEGY: NATIONAL TRANSPORT PRIORITIES

The National Planning Policy Framework (NPPF) states that '*plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people*'. The proposed TVP Park and Ride facility promotes sustainable transport by increasing accessibility between Wokingham borough and the wider area, and Reading.

The proposed scheme supports sustainable economic development in the area, providing additional public transport capacity to help to '*deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs*'.

BUSINESS STRATEGY: REGIONAL TRANSPORT PRIORITIES

THAMES VALLEY BERKSHIRE LEP STRATEGIC ECONOMIC PLAN

The Thames Valley LEP submitted their Strategic Economic Plan in March 2014. It outlines the economic case for the investment in infrastructure, enterprise and employment that is required to support the Thames Valley region's economic growth.

The TVP Park and Ride has been prioritised within the TVB Implementation Plan as it will '*enhance urban connectivity*'.

BUSINESS STRATEGY: LOCAL TRANSPORT PRIORITIES

WOKINGHAM BOROUGH CORE STRATEGY

WBC's Core Strategy identified the need for '*high quality express bus services...via the Park and Rides*', particularly along the A4 and A329 corridors between Reading and Wokingham, which the proposed scheme would support.

It has been noted that the construction of the TVP Park and Ride would aid any planning obligations for the developers involved in the delivery of the Strategic Development Locations (SDL), in particular North Wokingham (1,500 homes) and South Wokingham (2,500 homes). The developers would be expected to enter a legal agreement to ensure that the surrounding infrastructure and facilities are adequate to support the development and the surrounding area. Proposed measures include:

- à Improvements to the quality and frequency of public transport services along any part of the network;

- à High quality express bus service or mass rapid transit along A329; and
- à Measures to improve accessibility by non-car modes along the A321 and A329 corridors.

WOKINGHAM BOROUGH COUNCIL LOCAL TRANSPORT PLAN 3

WBC's Local Transport Plan (LTP3) for the period 2011-2026 has a policy specifically related to Park and Ride facilities, Policy PT8. It states that the '*Council will promote the use of Park and Ride services and will support the future introduction of new sites in the Borough where feasible.*' The LTP3 summarises the benefits of Park and Ride facilities as:

- à Enhancing the economic viability of town centres;
- à Reducing congestion; and
- à Promoting sustainable travel.

Policy PT8 also outlines plans to work cross-boundary with Reading Borough and Bracknell Forest Councils to deliver and retain the following Park and Ride facilities:

- à To the west of Coppid Beech Roundabout on the A329 in Wokingham;
- à In the vicinity of the M4 junction 11 (Mere oak);
- à The relocation or retention of the Park and Ride at Winnersh; and
- à A Park and Ride located in TVP to complement the high quality express bus services or mass rapid transit along the A4 or A329 corridors into central Reading.

In addition, Policy SP1 supports the Park and Ride proposals by stating that Wokingham Borough Council will '*actively support development of suitable major transport projects that are necessary to support the future growth and success of the borough.*' It also states that future transport growth needs to be managed effectively to support the build out of the SDLs, which without any transport network mitigation would result in an increase in overall journey times of 22%.

READING BOROUGH COUNCIL CORE STRATEGY

Reading Borough Council's (RBC) Core Strategy was adopted in January 2008 and updated in January 2015. Policy CS21 on Major Transport Projects states that as '*a regional transport hub, priority will be given to the implementation of the priority transport projects identified in the Local Transport Plan, particularly the upgrading of Reading Station interchange, Park and Ride Sites, Mass Rapid Transit, road improvements, Quality Bus Routes and associated transport improvements. Land needed for the implementation of priority transport projects will be safeguarded from development, to enable their future provision.*'

READING BOROUGH COUNCIL LOCAL TRANSPORT PLAN 3

RBC's vision for transport in the borough, as outlined in their LTP3, is that '*Transport in Reading will better connect people to the places that they want to go: easily, swiftly, safely, sustainably and in comfort.*' The council pledges to promote prosperity for Reading by providing a transport system to accommodate residents travelling for all journey purposes and by all modes, helping to '*meet the challenges of a dynamic, low carbon future*'.

Reading Borough Council also produces Area Action Plans (AAP's) including an Eastern Local Action Plan, which identifies that the '*A329(M) and the A4...suffer congestion during peak periods at Sutton Seeds Roundabout, which is attributed to the conflicting movements at the roundabout and the bottleneck at Cemetery Junction*'. The Action Plan outlines a number of future plans relating to the provision of Park and Ride facilities in the area:

- à *'To work with Wokingham Borough Council to progress the implementation of a long term Park and Ride strategy, considering alternative sites to Loddon Bridge, including the possible use of Broken Brow at the northern end of the A329(M);*
- à *To work with neighbouring authorities to deliver an enhanced interurban public transport network;*
- à *To work with the private sector and Wokingham Borough Council to innovate and secure delivery of integrated transport choices associated with new development proposed within Wokingham Borough; and*
- à *To work with Wokingham Borough Council to deliver an East Reading Transport Link and associated Park and Ride facilities.'*