

Alternative Summary Report:

Thames Valley Park and Ride

Business Case Independent Assessment

Rev 2

John Sharpe

24 Erleigh Road

Reading

RG1 5LX

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Executive Summary

There is an identifiable risk that the consultants used to generate and review the Business Case and the appraisal of the business case, provide opinions that are in line with their commissioning customers. A result of this is that it is particularly important to ensure that the procedures are as open as possible to public scrutiny to allow an alternative view of the proposals that may not coincide with that of the promoters to be considered.

Making the documents available only 5 working days ahead of the decision making meeting hinders this process. Additionally only a sub-set of the available documents have been made public. For example all of the appendices to the business case are missing. Despite this it has been possible to provide some comments on the Business Case that has been submitted.

The LEPs have come under criticism from the national Audit Office report in 2016 and it is important that actions are taken to address this:

“LEPs’ role has expanded rapidly and significantly but they are not as transparent to the public as we would expect, especially given they are now responsible for significant amounts of taxpayers’ money. While the Department has adopted a ‘light touch’ approach to overseeing Growth Deals, it is important that this doesn’t become ‘no touch’. The Department needs to do more to assure itself that the mechanisms it is relying on ensure value for money are, in fact, effective.”

Amyas Morse, head of the National Audit Office, 23 March 2016

There is a difficulty in modelling Park and Ride due to the flexible nature of demand, which is acknowledged in the WebTAG guidance. However in the presented Business Case there are areas where WebTAG guidance for best practice has not been followed. One example is that no modelling of existing Park and Ride to calibrate predicted congestion reduction. This is of particular importance since the Business Case rests heavily on this.

Research quoted in DfT Park and Ride Guidance dates back to 1997. As a result of this no account is taken of the potential disruption from the introduction of autonomous vehicles. This makes the use of an asset life of 60 years unrealistic. It is highly unlikely that there will not be significant shifts in personal transport that render the concept of park and ride redundant 2070. It would be more prudent to model on an asset life of 15 years.

There is no inclusion in the business case of land acquisition costs nor operating costs. Either these are a very serious omission from the business case or it implies that the majority land owner, Oracle, retains ownership and the maintenance costs. Using this model there are only CAPEX and no OPEX costs. Using the 60 year asset life, which is recommended by the DfT for assets which have an indefinite life, inflates the BCR. It also passes the risk of achieving the predicted benefits onto the public purse. If park and ride schemes become irrelevant as a result of the mass introduction of autonomous vehicles then, Oracle are left with a car park. That site may have little value as a car park in such a scenario but it will have been levelled for future development and they won't have the problem of dealing with slow worms or rare bats.

The environmental impact in the Business Case has been greatly underplayed.

The level of opposition to the scheme in the Business Case has been greatly underplayed.

The conclusion to the report of the financial approval 2.13 Wokingham: Thames Valley Park and Ride report states, "This scheme will contribute to the alleviation of congestion and poor air quality in East Reading, Woodley and Earley." It is not at all clear from the modelling that it would alleviate air quality issues and congestion in these areas. In fact in Earley and Woodley it is very likely to make them worse by "dragging in" traffic from other transport choices to park in the new car park on the edge of Reading, as the Earley Town Council describe it in their 2013 response to the Wokingham Report on Park and Ride.

On the basis of the Business Case provided it is recommended that funding for this scheme should not be approved.

The following sections provide a detailed exposition and in the conclusion a set of recommendations that must be addressed by any revised business case.

Carlo Ratti, Director, MIT Senseable City Lab

Ratti, whose lab anticipates how technology will transform the built environment, predicts that vehicle automation will require 80 percent fewer cars on any given highway. “In general, fewer cars could mean shorter travel times, less congestion, and a smaller environmental impact,” Ratti says. “Vast areas of urban land currently occupied by parking lots and roads could be reinvented for a whole new spectrum of social functions” like parks, public spaces, and maker spaces. Cars, he adds, could also become extensions of our homes. But Ratti warns: “We can also have nightmarish scenarios. For instance, if self-driving were to become so cheap that people would prefer jumping into a car than, say, taking the subway. In that case our cities could easily become gridlocked.”

Full Business Case Review

1. Key Aims and objectives

It is not proven that the introduction of the TVP P & R scheme will reduce congestion. To assume that by adding additional capacity in the form of a Park and Ride scheme will reduce congestion implies that the driver's contributing to the traffic do not have any choice over the mode, route or time of their travel. It will be very few drivers who do not have any choice over one or more of these parameters. The level of congestion tends to become self-limiting, leading to a latent demand that would absorb any additional spare capacity in the form of reduced congestion. That is when the delays become excessive many drivers will choose to walk, cycle, take a train, change their journey time to avoid peak congestion periods or possibly not make the journey at all and instead work from home. A result of this is that any assumption regarding congestion reduction should be treated with caution.

Even if there were any reduction in congestion the additional contribution to urban sprawl planned in the suburban / extra urban plans for additional housing in the Wokingham Borough would absorb this additional capacity. The locations of the relevant housing, Winnersh (450) units, North Wokingham (1,500) and South Wokingham (2500) are all already served by Public Transport links with stations in Wokingham and Winnersh. The North Wokingham development is proposed to include a new bus interchange on the A329 which will serve this development.

Focus should be put on developing walking, cycling and public transport routes from the proposed developments in North and South Wokingham to the existing rail station. The development of the TVP P & R only encourages people to drive further into Reading before changing to Public Transport, increasing the levels of congestion and pollution in Earley and Woodley.

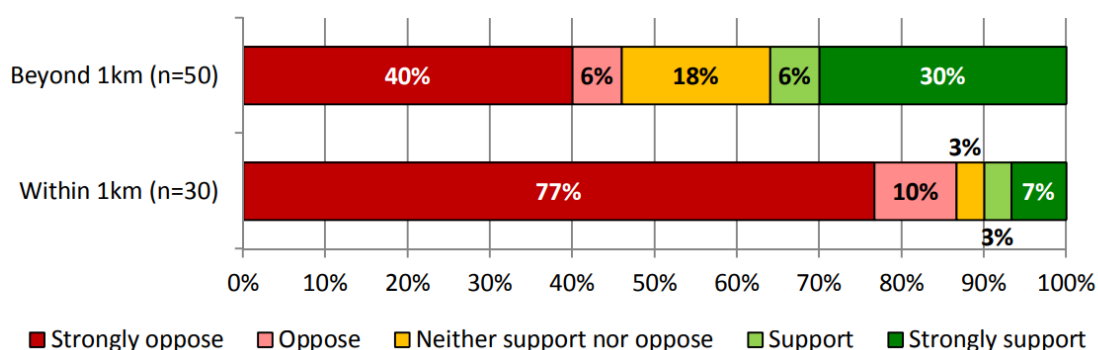
The only support provided by the TVP Park and Ride to the Winnersh Park and Ride is to encourage drivers to ignore it and drive further towards Reading.

2. Background of support

The review of the public consultation fails to mention the petition that was supported by in excess of the 2,750 members of the public nor of the 200 written objections submitted to Wokingham Borough Council. This was described by the Planning Officer as the most that have ever been received for a planning application in Wokingham.

Neither did the description of the consultation cover the overwhelming opposition to the scheme that was encountered.

Figure A4: Local and wider opposition to the proposed park and ride site



Analysis of the location of respondents showed that 87% of respondents who lived within 1km of the car park opposed the scheme.

3. Key Issues and responses

Questionable need for the Park and ride

Encouraging the use of the TVP P & R is likely to divert a certain number of drivers from using the trains from Maidenhead, Wargrave and Twyford and instead drive to the Park and Ride which conflicts with the objective “to reduce congestion on the A4 corridor.

The Business Case notes, “Subject to agreement, the TVP shuttle bus will be used as a means of travelling into town”

This is a critical aspect of the scheme. Without a concrete agreement no approval of funding should be given. This is of particular importance as the applicant assumes that users would pay on board the bus.

Duplicate of existing park and ride sites

“The TVP park and ride would provide a park and ride option for those visiting from along the A4 corridor (Twyford and Henley on Thames) which is not currently served by the park and ride sites at Mere oak and Winnersh Triangle. The site at Winnersh Triangle would necessitate driving away from Reading to use the bus – this may put some drivers off using this option. The TVP park and rides site therefore serves a new market along the A4 corridor, and does not duplicate existing park and ride facilities.”

Both Henley-on-Thames and Twyford are already served by existing rail services. Building the Park and Ride at Thames Valley Park will encourage a potential mode shift from public transport all the way to public transport part of the way or to reduce the portion of a journey by public Transport.

This potential problem is identified in The Department for Transport TAG UNIT M5.1 Modelling Parking and Park and Ride document, in paragraph 3.2.1 it acknowledges that,

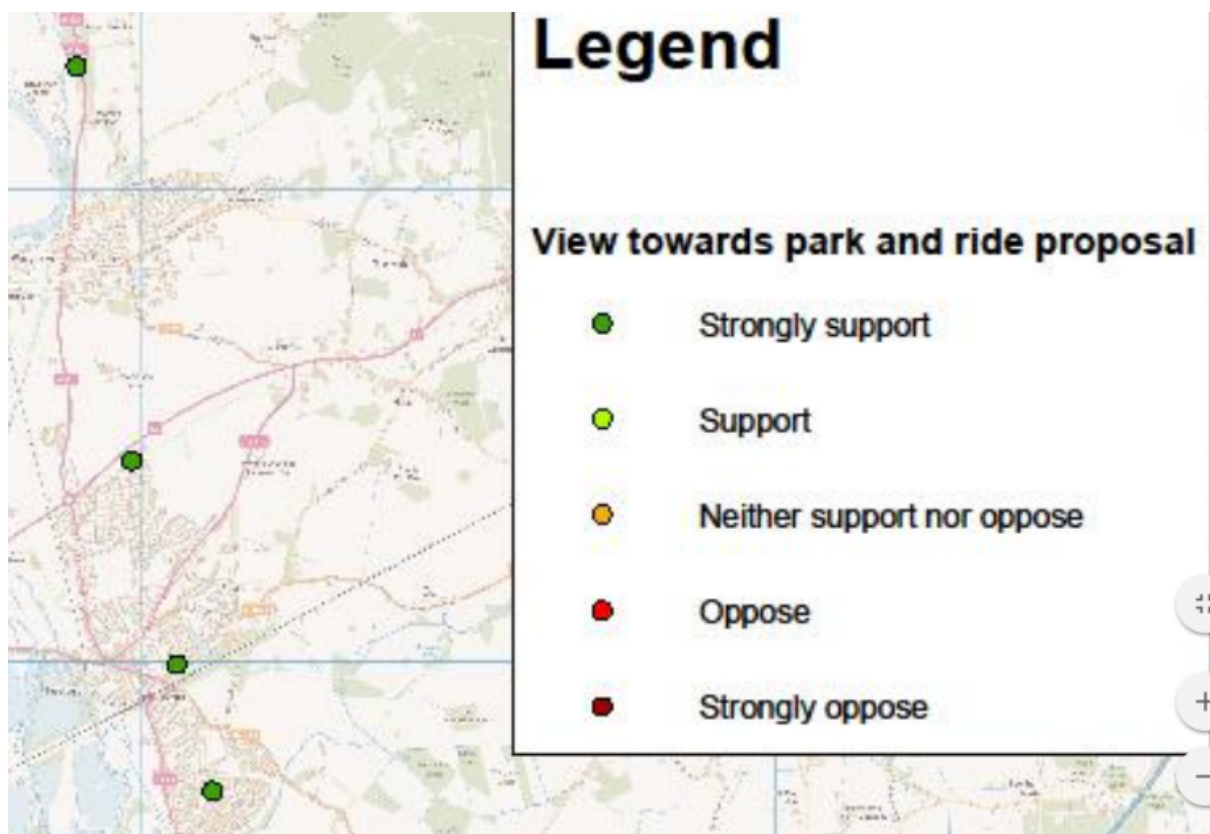
“Park-and-ride has the potential to attract users from both the car and public transport modes.”

This is further clarified in 3.2.4 by,

“park-and-ride has been shown to extract users from both car all-the-way and public transport all-the-way”.

This is not considered in contravention of WebTAG guidelines.

The potential for mode shift is indicated in the geographical analysis of the response to the consultation. Support for the scheme was strongest in the Twyford and Wargrave area where rail connectivity is already very good.



Why not extend existing park and ride sites

“Extending the park and ride site at Winnersh Triangle would involve adding another tier to the car park, increasing its visual intrusion, and would presently be uneconomical. Furthermore, expansion of existing sites would fail to serve the potential new user market along the A4 corridor.”

The Business Case does not explore the comparative visual intrusion of building a new park and ride in an area primarily used for leisure and wildlife, with building an additional level on an existing park and ride in an area primarily given over to transport interchange. It does not assess where the potential new user market would come from. The new housing development in Wokingham is already well served by the existing rail and park and ride facility and is does not access Reading via

the A4 corridor. The only additional potential users are likely to be those attracted to a transport mode shift which reduces the use of public transport.

Concerns about the effect on the existing TVP shuttle bus service

“Subject to agreement, the TVP shuttle bus would call at the park and ride site going into town on a morning and coming out of town on an evening. This would have minimal impact on journey times, and would enable the bus to be used in the opposite direction to its current peak passenger flows.”

The main flows into Reading are in the evening based on the transport assessment submitted with the planning application. This is shown in figure 1 which provides a graphical representation of the data provided in the traffic assessment that accompanied the planning application for the TVP park and Ride.

Traffic along London Road

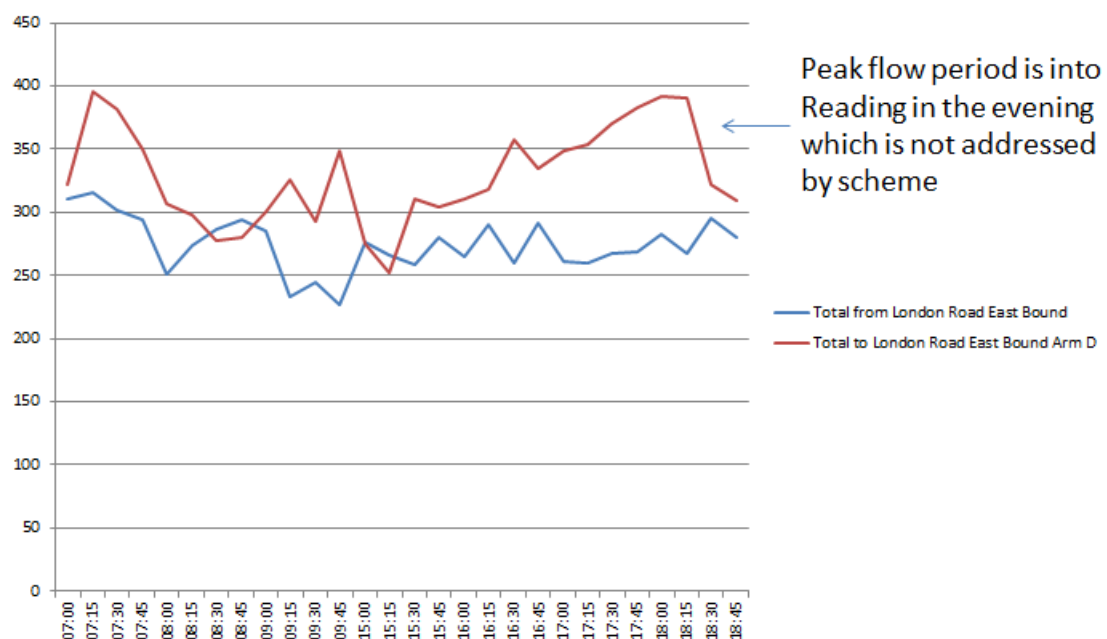


Figure 1 Flows of traffic to and from Reading along the A4 from the roundabout intersecting the A3290

The PM peak will not be addressed by the proposal.

4. Missing items from Key issues identified

Assessment of the impact on biodiversity.

No Environmental Impact Assessment (EIA) was carried out. However ecological surveys have been conducted. These identified that the hedgerow, woodland and calcareous grassland represent habitats of Principal Importance and are listed on the Wokingham Borough Council Biodiversity Action Plan.

The ecology survey report identifies that a medium population of slow-worms were identified. It also identifies that the site is of local importance for foraging and commuting bats including Myotis and Nathusius' Pipistrelle species. The Nathusius' pipistrelle bat is a rare species in the UK. "At present, threats to the species would appear to be reduction in insect prey due to degradation of water quality, loss of foraging habitat such as woodland, treelines and hedgerows plus loss of roosting habitat." Bat Conservation Trust.

The Wokingham Borough Council Ecology Officer, Duncan Fisher was particularly concerned in correspondence with the consultants that produced the Business Case that the lighting risked fragmentation of commuting routes by artificial lighting.

In the response from the Planning Manager, Kieran Roughan to the East Reading MRT Environmental Impact Assessment scoping report the point was made that,

"The PNR is an associated/allied scheme to the MRT and the environmental effects as a whole need to be assessed. It is incorrect to present the MRT as a stand-alone proposal. The MRT relies on the PNR in operational terms and many of the environmental effects will be as a result of MRT + PNR"

As a result of this the EIA for the combined project should be considered when making an appraisal of the Environmental Impact of the intervention.

The business case minimises these concerns by saying in the Biodiversity section,

"The value of the majority of the habitats on the site are however of low inherent botanical value or ecological distinction, with their value heavily influenced by their location along the River Thames (hence their contribution towards the wider river corridor and connected landscape), and their potential to support protected or notable species."

5. Wokingham Borough Core Strategy

It is very doubtful whether the TVP Park and Ride would contribute to any of the Council's core strategies that are referred to in the business case, these were:

- Improvements to the quality and frequency of public transport services along any part of the network;
- High quality express bus service or mass rapid transit along A329; and
- Measures to improve accessibility by non-car modes along the A321 and A329 corridors

The addition of the TVP Park and Ride does not increase the quality or the frequency of the existing TVP bus service. It does not provide any service along the A329 and it does not improve accessibility along the A321 and A329 corridors.

6. Economic case

"No spare car parking is available within TVP Business Park as all parking spaces are allocated to current and future tenants."

Very large areas of parking space are available within Thames Valley Park. These may be allocated to future tenants but the lifecycle of tenancy negotiations would make it possible to provide a trial of a Park and Ride to test the predicted forecast demand to ensure that such a Park and Ride location would be viable and that the predicted congestion reduction targets are achieved.

No evidence is presented based on analysis of an existing Park and Ride Scheme to show existing usage. Winnersh would have been an obvious analogue to use to calibrate the modelling of the proposed TVP Park and ride.

Nor is the question of mode shift from public transport to part private transport or the potential extension of the private journey in a mixed private and public journey. This ignores the guidance provided in WebTAG unit 5.1 Modelling of Park and Ride

“3.3.1.5 For both of the approaches, it is desirable to model an existing park-and-ride operation in order to calibrate the process. Site Specific Constants can be introduced to aid the calibration process. However, some allowance should be made in the calibration for the potential transfer from existing public transport which is not captured by either approach.”

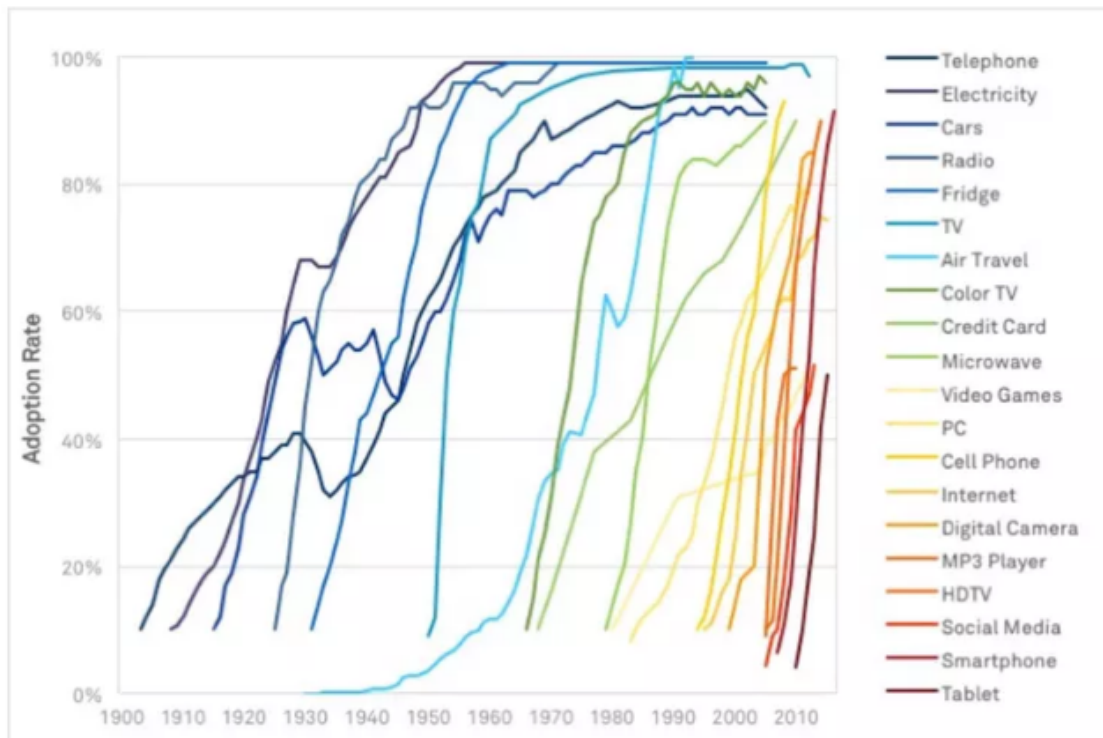
The Business Case Independent Assessment forecast the TVP P & R to be fully utilised by 2033. It is very likely that changes in personal transport brought about by the introduction of autonomous vehicles will render the car park obsolete by then; in which case it will never reach full utilisation.

7. Assumptions

The costs have been discounted over a period of 60 years to provide a Net Present Value for the costs and benefits. This is not realistic given the potentially disruptive impact of new technologies such as autonomous vehicles. The figure of 60 years is suggested by the DfT,

“ For many transport investments, including indefinite lives including most, road rail and infrastructure.”

This assumption would have been relevant when considering the building of the Great Western Railway but given the increasing fast adoption of new technologies it would be foolish to use this assumption with a Park and Ride investment. A more prudent assumption would be to use 15 years as the expected asset life. Figure 2 illustrates the increasing rate of adoption of technological innovations since 1900.



Source: Asymco

Figure 2 Increasing rate at which new technologies have been adopted over time

8. Assessment of social and distributional impacts

“It was not seen as beneficial to consider physical activity, as the scheme is a public transport scheme that will be accessed by private vehicles and therefore will not generate an increase in walking or cycling.”

Providing a park and ride scheme may act as a disincentive to people who currently walk and cycle into Reading and this should have been considered.

9. Monetised Benefits

In the Independent Business Case appraisal it specifically identifies that the estimates of the decongestion are significant to the Business Case and the potential uncertainty that surrounds this estimate.

“It is noted here that if the decongestion benefits are significant then the Park and Ride will be less attractive. A second iteration of the demand model, with the updated journey times, would normally be a requirement. The MEC methodology does not supply journey times, so the requirement for a second iteration does not apply. However, it should be noted that, all other things being equal, **the stated decongestion benefits could be over-estimated** because of this, given that 10% of trips on the A4 are predicted to be removed.”

Without these estimates of decongestion the Business Case would not be viable.

10. Financial Case

No acquisition, operating or renewal costs have been included in the cost estimates shown in the business case but the benefits have been estimated over a 60 year period. This is contrary to WebTAG unit A1.2 – scheme costs, 2.4 Operating Costs

“2.4.1 The appraisal should include realistic and comprehensive operating cost estimates, identifying the main components. All operating cost estimates should include an assessment of real growth over time.”

This is either an omission or an indication that the ownership of the land will remain with Oracle and the operating and renewal costs will stay with Oracle.

11. Conclusion

On the basis of the information supplied the business case should be rejected. A re-submitted business case should address the following concerns:

1. Calculation should be made of the potential for mode shifting from existing public transport methods or the reduction of the public transport section of a journey by attracting passengers from other public transport modes such as the use of Twyford or Winnersh station or the Winnersh Park and Ride.
2. The usage of the existing Winnersh Park and Ride should be measured and used to calibrate the model used to estimate expected usage and decongestion benefits of the TVP Park and Ride.
3. The level of congestion reduction and the benefit derived from it should be reviewed. The BCR is highly dependent upon this. If it does not materialise either from self-limiting related to latent demand or other interventions that may be introduced such as congestion charging or low emission zones, then the BCR predicted is largely illusory.
4. The level of public objection to this proposal needs to be taken seriously and weighed as to whether there is a sufficiently strong case to override it.
5. No funding should be committed to without an agreement that the TVP bus will be used as a means of travelling into Reading.
6. The alternative of extending the Winnersh Park and Ride location has been dismissed without serious consideration. This should be given proper consideration as a realistic alternative.
7. Any traffic intervention should address the bulk of the traffic which enters Reading during the PM peak 1730 to 1830.
8. The Environmental Impact Assessment of the combined East Reading MRT and TVP Park and ride proposals and the mitigations that it identifies should be reviewed and form a component of the The Environment Objective Appraisal, WebTAG Unit 3.3.
9. If other areas of recommendations can be satisfied then consideration should be given to a trial using an existing unused parking area in Thames Valley Park, to confirm that the project projections related to take up and congestion reduction are valid.
10. The Business Case monetary benefit should be re-calculated using a more realistic asset life of 15 years.
11. Assessment should be made on the potential for a reduction of physical activity by encouraging the use of the bus rather than cycling.

12. It should be clarified whether the land acquisition and operating costs are missing from the Financial Case if so the monetary benefits should be recalculated to include them.
13. If it is the case that the land remains the property of Oracle, then there should be an estimation of the costs related to restoring the land to its original bio-diversity value. There should not be an implicit assumption that it will subsequently be re-developed without the penalty of having to overcome the issues that relate to the environmental impact to bio-diversity.