APPENDIX B

Response to key issues

This note provides officers' and consultants' initial response to some of the general traffic and environmental issues raised during consultation. Issues related to specific locations, identified as part of the consultation, are being considered further and design changes to meet the concerns are being developed. These potential changes will be discussed with key stakeholders before being finalised. A separate Cabinet Member report will be submitted proposing any changes identified through this process.

1.0 GENERAL ISSUES

1.1 WHY MAKE BAKER STREET AND GLOUCESTER PLACE TWO-WAY?

1.1.1 **Questions have been asked about the benefits of converting Baker Street and Gloucester Place to two-way and why public realm improvements cannot be made without making this change**.

1.1.2 The main aims of converting the two roads to two-way are stated below -

- To remove the wide, imposing carriageways with multiple lanes, which give a sense of an urban motorway
- To provide a balance between 'movement' and 'place' function of these streets
- For better and more efficient traffic management;
- To improve accessibility to local streets in the area by providing new routes and allowing more convenient turns at junctions;
- To reduce vehicle journey distances, as the need to circumnavigate the one way system is removed;
- To provide greater route choice for local traffic.
- To have both northbound and southbound bus services on the same streets as far as possible, which is more intuitive and improves bus passenger amenity;

1.1.3 There is evidence of benefits from similar schemes in London, such as Piccadilly/ St James's, South Kensington, Tottenham Hale, Shoreditch Triangle and Camden Council's West End Project proposals for Tottenham Court Road/ Gower Street, as well as other similar initiatives in major cities

around the world.

1.1.4 It is considered that, overall, the scheme is unlikely to result in any change to the number of accidents, but that it could reasonably be assumed that there is expected to be a reduction in the proportion of accidents resulting in serious injury of at least 50%. It is generally considered that accident numbers and/or severity would reduce under a two way arrangement as a consequence of:

- reduced vehicle speeds, arising from narrower streets and removal of the multilane approaches;
- Improved and increased availability of formal pedestrian crossings, shorter crossing distances;
- Improved cycle facilities and greater driver awareness of cyclists;
- Greater driver awareness due to two way operation legibility, fewer weaving manoeuvres and the increase in conflicts at junctions;

1.1.5 Retaining the current one-way system, with footway widening to provide opportunity for public realm improvements, was considered at an early stage of scheme development. It was always recognised that this would not achieve all the objectives of the key stakeholders (TfL, Westminster City Council, Baker Street Quarter Partnership and Portman Estate) and would, if pursued, be designed in such a way that it would not prejudice conversion to two way at some point in the future. Also, the cost of undertaking these works would be significant for relatively minor gains for any road user or pedestrian.

1.1.6 The proposed conversion to two way working was identified as the preferred scheme for a number of reasons:

- The Mayor's Transport Strategy and cycling strategy includes policies to remove one-way gyratories;
- The TfL's Roads Task Force aspiration for a High Street environment (as opposed to its current form of a major road Connector) with permeable streets and safe speeds to enhance town centre vitality;
- TfL's aspiration for provision of both northbound and southbound bus services on the same road as far as possible.
- There is no funding for a one-way alternative, other than the standard maintenance budget which does not allow for public realm enhancements, improvements to street lighting (new lamp columns, white light – with related safety benefits), improved footway materials or much needed improvements to and the addition of new pedestrian crossings (due to imminent growth in pedestrian numbers from Chiltern Railways at Marylebone Station and Crossrail) and cycling facilities (as a consequence of rapid growth in cycling across London and the opening of the cycle

superhighways);

- It prevents the need for several stages of scheme implementation, reduces costs and disruption due to works, and delivers a greater degree of benefits within a shorter timeframe;

1.2 TRAFFIC CAPACITY REDUCTION (6 TO 4 LANES); TRAFFIC CONGESTION; RAT RUNS INTO RESIDENTIAL STREETS

1.2.1 **Concerns have been raised about the perceived traffic capacity reduction by 30% and that it may lead to traffic congestion and rat-runs into residential streets**.

1.2.2 The issue of road capacity and network performance (how close to capacity a street might operate) should not be confused. Detailed analysis of traffic conditions shows that there are a lot of junctions throughout the project area that operate with spare, and therefore potentially wasted, capacity. It is therefore possible to reduce the road width on Baker Street to provide wider footways, and on Gloucester Place to provide cycle lanes and pedestrian crossings, without giving rise to traffic congestion problems.

1.2.3 This means that a perceived 30% reduction in road capacity due to lane loss does not necessarily result in a 30% reduction in actual capacity (because the amount of green time provided to traffic also affects capacity) or indeed a 30% reduction in network performance.

1.2.4 It should also be noted that traffic will balance across two southbound and northbound routes, as opposed to the single routes that are currently available.

1.2.5 The scheme has been designed to be ‘capacity neutral’. This means that in general there is not expected to be any significant reassignment of traffic away from the main roads onto local residential roads. The traffic modelling is considered to be a worst case, and does not make any allowance for the likely traffic reduction effects of other major schemes that are to be introduced across London over coming years. It does not also take into account the wider benefits that are to be achieved through the current Transport for London (TfL) Active Traffic Management (ATM) strategy, which is designed to ensure that traffic is kept moving and does not cause the levels of congestion that might lead to rat-running within the study area.

1.2.6 Any change to traffic patterns within the local area as a consequence of the two way arrangement will follow from the introduction of new permitted turns at junctions and greater accessibility. This will result in a reduction in journey distances, as vehicles no longer have to negotiate the one-way system and can take shorter, more convenient routes. This means that on some streets

traffic levels may rise slightly, and on others it will reduce. For example, southbound traffic on A41 Park Road heading for the Marylebone area must, at present, use Melcombe Street and pass through Dorset Square. Under the scheme proposals, this traffic will take a more direct route via Rossmore Road, thus avoiding Dorset Square. There are a range of local examples where benefits in local journey routes can be demonstrated.

1.2.7 A table showing changes to traffic flow, as a result of the proposed scheme, on various streets within the study area was provided as part of the consultation documents. These changes to traffic flow have been assessed in detail using the TfL central London strategic reassignment model (CLoHAM). This is a regional model of the road network that is firstly validated against traffic turning counts and origin/destination data of baseline conditions, in accordance with national and TfL accuracy criteria. Changes are then made to the modelled road network to reflect the proposed scheme, and the model is then used to forecast if and how traffic patterns alter as a consequence of the scheme. These traffic models are then independently audited by TfL's Network Performance team. Changes in traffic patterns will inevitably occur when altering a road system from one way to two way, as new turning movements and routes are provided. Forecast traffic patterns and any wider reassignment are a function of journey time, and so the model assigns traffic to the network in a way that reduces journey times as much as possible. The modelling carried out for Baker Street Two Way Project demonstrates that, overall, the traffic on the Baker Street and Gloucester Place corridors can be reallocated between the streets without significant reassignment impact on the wider area, and that there are not expected to be significant changes to traffic flows on local roads.

1.3 TRAFFIC MODELLING – METHODOLOGY AND ROBUSTNESS

1.3.1 Comments have been received regarding the methodology and robustness of traffic modelling undertaken for the proposed scheme and hence doubts have been raised on the figures showing changes to traffic flows on various streets in the study area

1.3.2 Meetings have been held with residents' associations to explain how the proposed scheme has been tested for traffic impact. Westminster's transport consultants are recognised as specialists in the field of feasibility scheme design and traffic modelling, having worked on similar schemes across London for over 15 years. The form and process of traffic modelling used in the Baker Street Two Way Project is recognised across the UK and around the world. The traffic modelling suites used (SATURN, VISSIM, TRANSYT and LinSig) are industry standard and have been used to assess scheme of this nature for decades. The process is as follows:

- Validate all strategic, micro-simulation and local operational models to existing conditions to recognised degrees of accuracy to achieve Base models that are fit-for-purpose (using traffic flow and origin/ destination data, journey time measurements, accurate junction and link geometry and method of control characteristics, and performance measurements);
- Develop proposed models that reflect the intended geometric and method of control changes to the road network and junctions;
- Carry out strategic modelling (SATURN) to identify changes in traffic patterns;
- Use the traffic flow forecasts in the local operational models (TRANSYT and LinSig) to develop and refine detailed network operational characteristics (link and junction design and traffic signal timings, degree of saturation, queue length);
- Use the micro-simulation model (VISSIM) to develop/ demonstrate the detailed operation of the proposed scheme and identify operational characteristics (journey times, impacts of congestion, overall performance)

1.3.3 The traffic modelling has followed the prescribed modelling process set out in the Transport for London Traffic Modelling Guidelines (v3). These modelling guidelines are applied to every new traffic scheme in London, and require even greater degrees of accuracy than the national guidance from the DfT. There are specific requirements for accuracy of traffic flow at every turn, the journey times across the network, traffic signal operation and capacity and traffic behaviour. All the models used (SATURN, VISSIM, TRANSYT and LinSig) have been prepared by experienced consultants, audited and approved by TfL's Network Performance team to ensure robustness and that they are fit-for-purpose

1.3.4 The modelling process adopted for the project ensures that the proposed scheme is resilient, is based on best practice traffic models and has been approved by Transport for London, who has the overall responsibility for setting standards for and approving traffic modelling in London.

1.4 AIR QUALITY; NOISE IMPACT

1.4.1 Concerns have been raised about impact of the proposed scheme on air quality and noise levels

1.4.2 The air quality impact assessment report for the proposed scheme is being finalised and will be published when complete. An initial assessment undertaken by TfL showed no significant impact as a result of the proposed scheme.

1.4.3 As well as concluding the assessment of the consulted scheme, all possible revisions will be further assessed as to impact on air quality.

1.4.4 However, overall it does not appear that significant changes across the area will arise from either the original or revised proposals given the already high levels of air quality pollution.

1.4.5 The City Council has been successful in its Low Emission Neighbourhood (LEN) bid for the Bryanston & Dorset Square/ Marylebone ward area, which was supported by the Estates and BIDs.

1.4.6 A noise impact assessment report for the proposed scheme is being finalised and will be published when complete. An initial assessment undertaken by TfL showed no significant impact as a result of the proposed scheme.

1.4.7 The report is still subject to completion and alteration following any future design changes recommended as a consequence of the consultation process, nevertheless the initial findings as they stand are set out below:

- The initial results show that the beneficial impacts outweigh any adverse impacts. There are some small areas of localised adverse impacts which will be moderate in the short term but minor in the long term.

1.5 CYCLING

1.5.1 **Many comments have been received as part of the consultation on the provision of cycling facilities. These include requests to provide these facilities 24/7; provide segregated cycle lanes and/or to restrict Baker Street for buses and cyclists only**.

1.5.2 It has never been an intention or objective of the Baker Street Two Way Project to consider closing Baker Street either partially or entirely (physically and/or temporally) to general traffic. Any such scheme would have a significant impact on access to properties on Baker Street, would have a significant impact on strategic traffic along the corridors, is likely to result in significant traffic reassignment to residential side streets or require considerable traffic management over a wider area to restrict levels of traffic entering the area. This would not achieve one of the stated objectives of the scheme when first developed, which is to ensure that the scheme is ‘capacity neutral’.

1.5.3 As part of the initial feasibility design work, a specific study was carried out by Westminster City Council and their consultants in October 2013 to determine the potential impacts, benefits and implications of a range of segregated cycling facilities on Gloucester Place. This was because Gloucester Place was then being considered as the route for Cycle Superhighway CS11 by TfL. Variations on cycle segregation strategies were based on the following three

principles:

- Provide a bi-directional segregated cycle facility on a single side of Gloucester Place (similar to the Tavistock Place Scheme)
- Provide uni-directional segregated cycle facilities on either side of Gloucester Place (similar to the Royal College Street scheme)
- Provide uni-directional segregated facilities on one side of Gloucester Place and use the proposed Upper Montagu Street queitway to provide for the opposite movement.

1.5.4 This design work informed the option development process described in *TR01 Scheme option feasibility report (August 2014)*, which compared and contrasted issues and benefits of four options for cycling provision, namely:

- Option A – 1.5m wide with-flow, advisory cycle lanes in each direction;
- Option B – 3m wide bi-directional segregated cycle track on the west side of Gloucester Place (north), switching to the east side of Gloucester Place (south), with shared pedestrian and cycle crossing facilities (to minimise traffic impact);
- Option C – as Option B but with separate pedestrian and cycle crossing stages within the traffic signal operation;
- Option D – 2m wide with-flow, mandatory cycle lanes in each direction

1.5.5 This assessment showed that provision of segregate cycling facilities on Gloucester Place was unlikely to provide sufficient traffic capacity for an acceptable level of traffic network resilience to be achieved. It would also have significant adverse impact on journey times both for buses and general traffic.

1.5.6 Since the study was carried out in 2013, the route for CS11 has been revised and no longer follows Gloucester Place. Nevertheless, it was felt that a high level of cycle provision should still be provided under the Baker Street Two Way scheme, so that adequate links and connections to the Westminster Quietway Cycle Grid and the Cycle Superhighway CS11 on Portland Place-Outer Circle could be provided. It is expected that TfL's formal consultation on CS11 will be undertaken later this year.

1.5.7 It was therefore concluded that Option D which provides an unsegregated arrangement with mandatory cycle lanes, has many benefits. It provides the greatest level of traffic resilience and does not have as significant an impact on parking and loading (subject to the hours of operation) as the segregated options. It also allows greater freedom to locate bus stops and services on Gloucester Place. The segregated options would rely on all bus services being transferred to Baker Street, which causes significant issues with bus routes and the need for buses to use local roads, which is not acceptable. It was

concluded that none of the cycle segregation options would be feasible because of the impact they have on traffic capacity; none would achieve the stated objective of being 'capacity neutral'.

1.5.8 The proposed scheme therefore includes northbound and southbound mandatory cycle lanes on Gloucester Place. Because of servicing, loading and resident/visitor parking requirements along the corridor, it would not be possible to maintain the cycle lanes 24/7. A separate study to consider the hours of operation was carried out by Westminster and their consultants in April 2015. The study concluded that:

- Considering the range of data that is available, it is concluded that the peak periods of cycle activity are likely to be in the AM peak between 0730-0930hrs and in the PM peak between 1700-1830hrs. As cycling activity is likely to increase as a consequence of the enhanced facilities, it is reasonable to expect that cycle traffic demand will increase across the peak periods, extending these periods. London-wide cycle data (which is highly tidal in nature) shows a trend for cycle activity to extend beyond 1830hrs.
- Considering the current waiting and loading restrictions on Gloucester Place, and those on existing and proposed Cycle Superhighway routes, it was recommended that as part of the consultation, views should be sought on the hours of operation for proposed cycle lane in order to gauge public opinion on local cycling needs/ expectations and requirements for loading, servicing and parking:
    - Cycle lanes to operate 7am to 7pm (Monday to Saturday)
    - Cycle lanes to operate 7am to 10am and 4pm to 7pm (Monday to Saturday)
    - No cycle lanes at all
    - No preference Other (Please write in)

1.5.9 The consultation response showed that a third of all respondents expressed a preference for cycle lanes to be in operation Monday-Saturday between 7am-7pm. As many respondents voted for no cycle lanes at all as those who showed a preference for 24/7 access to the mandatory cycle lanes.

1.6 SAFETY

1.6.1 **Concerns have been raised by some respondents over safety of people and children in particular, on side streets due to a perception of substantial increase in traffic on quiet residential streets due to rat-runs**.

1.6.2 The concern about rat-run on residential streets has been addressed in

Section 1.2 and the information provided during consultation shows that there are not expected to be significant changes to traffic flows on local residential roads. Changes to specific junctions are also being considered in order to address concerns about rat-running.

1.6.3 Westminster City Council consultants carried out an analysis of accidents across the study area in order to identify any particular trends and determine the likely impact of the scheme on road safety. It is generally considered that accident numbers and/or severity would reduce as a consequence of:

- Removal of one way streets
- Reduced vehicle speeds, arising from narrower streets and removal of the multilane approaches;
- Improved and increased availability of formal pedestrian crossings, shorter crossing distances and pedestrian countdown;
- Improved cycle facilities and greater driver awareness of cyclists;
- Greater driver awareness due to two way operation legibility, fewer weaving manoeuvres and the increase in conflicts at junctions;

1.6.4 There has been very little analysis of one way to two way conversions within London as regards accidents. It is difficult to draw direct comparisons, yet similar schemes at Shoreditch Triangle, Piccadilly and South Kensington seem to provide evidence that it is reasonable to expect at least a reduction in the proportion of accidents resulting in serious injuries to road users.

1.6.5 Studies from the US have certainly demonstrated reductions in the number of collisions following conversion from one way to two way streets.

1.7 PARKING AND LOADING

1.7.1 Concerns have been raised about impact of proposed scheme on parking and loading restrictions. Comments have also been received that detailed information, including the number of parking spaces that will be affected, was not provided during consultation

1.7.2 Usually for public realm projects, consultation is undertaken when design is fully developed and details of changes to parking and loading restrictions have been finalised. The proposed Baker Street Two Way scheme is a major scheme potentially bringing major changes to the area. Therefore public consultation was undertaken earlier on in the design stage to get stakeholders' views before details are finalised. Plans showing indicative changes to parking and loading restrictions were provided as part of consultation documents.

1.7.3 Subject to consultation responses and approvals, details of changes to parking and loading restrictions will be developed during the next stage of design. Various responses received regarding parking, loading and servicing requirements of businesses and residents will be considered while developing these designs.

1.7.4 A statutory Traffic Management Order consultation will be undertaken on changes to parking and loading restrictions.

1.8 20 MPH ZONE

1.8.1 **In relation to this proposal, TfL have recently requested WCC to consider the benefits of 20mph area wide limit as part of this scheme. St Marylebone Society and some residents have also asked for a 20mph zone to be considered in their response to public consultation**.

1.8.2 The Council is currently developing a walking strategy and is expected to go out to full consultation by end of this year. Within this, we will be seeking stakeholders' including residents' views on support for 20mph zones or 20mph limits. Therefore, at this stage of the Baker Street Two Way project, it is too early to advise what the Council's position will be. We would therefore urge stakeholders to respond to that consultation.

1.8.3 TfL are currently trialling a 20mph limit on nine sections of TLRN roads elsewhere in London. Most of these roads are strategic roads. We will be monitoring the effects of this trial and the zones implemented recently by Camden, City of London, Islington etc.

1.8.4 A technical review will be undertaken to assess the feasibility of 20mph zone or limit as part of this scheme. This will involve a review of existing schemes on similar types of roads to assess impacts and benefits.

1.8.5 It should be noted that the introduction of a 20mph zone is unlikely to physically change road layouts and traffic flow on proposed Baker Street Two Way scheme.

2.0 ISSUES RELATED TO SPECIFIC LOCATIONS

2.1 Issues related to specific locations, identified as part of the consultation, are being considered and design changes are being developed. The plan below shows the key locations for review. These potential changes will be discussed with key stakeholders before being finalised.