Royal Free Hospital - The Proposed Pears Building

Review of the Transport Assessment and Related Documentation

1. Introduction

1.1 Vectos was commissioned by the Royal Free Charity (RFC)…

> *to provide highway and transport advice* (TA 1.1)

in relation to proposals for the Pears Building, which would include an addition to the Institute of Immunity and Transplantation at the Royal Free Hospital site in Pond Street, in the London Borough of Camden.

1.2 The Hampstead Green Neighbourhood Group (HGNG), in conjunction with DRK Planning, have requested Capital Traffic Management Limited (CT) to review the Transport Assessment (TA) and other documents prepared by Vectos.

The documents are….

Transport Assessment	TA
TA Scoping and Feedback	TASF
Parking Survey Results	PSR
Travel Plan	TP
Parking Strategy	PS

As they are largely mechanically assembled, the survey data reports by other consultants are not reviewed herein.

1.3 It should be noted that the National Planning Policy Framework (2012) states…

> *Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe* (TA 5.6)

1.4 Quotations from the documents are *italicised* with the document and paragraph number appended (if available).

Issues considered to be of significance by CT are shown in **bold**.

2. The Royal Free Hospital

2.1 The Royal Free (RF) is a large hospital which operates 24/7/365, and serves more than 500 000 patients a year and 10 000 visitors a week (TP 2.2).

The RF employs approximately 4640 staff, 68% of whom work full-time, 17% part-time, 9% flexible hours and 6% fixed hours (TP 3.2). Lacking more detailed information, the synthesised data below assumes that the flexible-hours staff are full-time (5 days/week) and the fixed-hours staff (3 days/week) are part-time, and that there are 220 employment-days (44 weeks) a year. This may result in a slight under-estimate of the travel generated by staff.

2.2 The total number of days of staff employment is estimated in Table1 below.

Table 1 Staff Employment Estimates

Employment	*Proportion*	*Number*	*Days/week*	*Person-days/year*
Full-time	68%	3155.2	5	694144
Part-time	17%	788.8	3	104121.6
Flexible	9%	417.6	5	91872
Fixed	6%	278.4	3	36748.8
Totals	**100%**	**4640**		**926886.4**

2.3 Assuming a mean of 2 visits a year by 500 000 patients to the hospital, the travel generated by staff, patients and visitors is estimated as shown in **Table 2** below.

Table 2 Estimated Travel Generated by the Royal Free Hospital*

	Staff	*Patients*	*Visitors*	*Totals*
Annual trips	927 000	1 000 000	520 000	**2447 000**
Daily trips	2540	2740	1425	**6705**
Proportion of total	**37.9%**	**40.9%**	**21.3%**	**100%**

* *numbers rounded*

2.4 **At least 60% of the travel to the site is therefore not covered by the present Travel Plan.**

2.5 There are 354 car parking spaces on the hospital site (Vectos reports both 350 and 354) of

which 190 are for staff (TA 3.11).

However, the 'observed modal split (2006)', suggested that 5 – 10% of the daily trips by staff (2540) are by car, either alone (SOV), sharing or as a passenger (TA 6.2). Assuming that the Travel Plan has been successful in reducing this proportion, say to 4 – 8%, then there is demand for 102 – 204 parking spaces.

On-site parking permits are only issued in *extenuating* (TA 6.5) or *in exception* (sic) (TA 9.5) circumstances. Assuming furthermore that only full-time staff would be eligible for them, it appears that current parking demand by staff is largely met by the current provision.

2.6 The above **assumes that the sample of returns to the survey (10%) is fully representative of the whole staff** (TP 3.2). It may be argued, for example, that those who are more sympathetic to the objectives of the Travel Plan might be more inclined to respond to the survey. This may also be correct of younger and more junior staff.

In other words, more of the staff might be travelling to work by vehicle than indicated. If so, they would face significant difficulties in parking anywhere convenient to the RF. A larger proportion than shown in Table 6.1 may be utilising P + R from somewhere convenient to the RF, or on routes to Belsize Park and Hampstead Heath stations.

2.7 There are 148 spaces available for patients and visitors (over 4000 a day). With **no data available on the modal shares for both groups and their estimation suspect** (*para* 4.6 below), it is not possible to determine whether there is sufficient parking available for them at present. Given the frequent queues of vehicles in Pond Street waiting to enter the car parks, and the overspill of Blue Badge parking into residents' parking bays in surrounding streets, the indication is that there is not (*para* 3.3 below).

2.8 It is understood that most staff would arrive and leave during peak hours. Patients and visitors tend to arrive during the daytime inter-peak period. The temporal displacement of these movements assists in reducing the impact of the two flows.

2.9 There are 130 cycle spaces at the RF currently. LB Camden have reminded Vectos that 200 would be required for the Pears Building (TASF). Quoting the same London Plan REMA standards, Vectos proposes that only 56 spaces would be provided (TA 4.12).

3. Access to the Royal Free Hospital

3.1 Traffic permitting, access by vehicle to the environs of the RF is usually not difficult.

3.2 Analysis of parking accumulation in the various RF car parks suggest that peak-hour arrivals by staff in cars is low, again confirming the low modal share for cars for the journey to work (TSR Figures 1 – 6).

During the working day however, arrivals by patients and visitors quickly reach close to the limits of the parking capacity available (TA 8.3).

Failure to find a space immediately probably results in **additional traffic generated by patients and visitors as they travel to the other car parks**. This effect could be mitigated by the provision of real-time displays on the approach routes to the RF that would indicate parking availability and location.

Congestion in the car park, and queues in Pond Street

3.3 Local residents report…

- frequent queues of 4 – 7 cars in Pond Street trying to access the public car park
- queues exiting the public car park
- significant numbers of Blue Badge users occupying residents' parking spaces in proximity to the hospital, as illustrated in **Table 3**. This causes inconvenience to

residents.

None of the above are mentioned in the Transport Assessment, suggesting limited if any off-site surveys or local consultations.

Table 3 Residents Parking – Capacity and Blue Badge Occupation of Spaces in Parking Bays*

Street (selected sections)	*Disabled*		*Other*		*Total*		
	Cap	*Occ*	*Cap*	*Occ*	*Cap*	*Occ*	*%*
Hampstead Hill Gardens	2	3	55	16	57	19	**33**
Haverstock Hill	3	4	4	2	7	6	**86**
Lyndhurst Road			10	3	10	3	**30**
Belsize Lane							
- pay & display			4	1	4	1	
- bays			23	2	23	2	
- single yellow line			(3)	3	(3)	3	
- total			27	6	27	6	**22**
Totals	5	7	96	27	101	34	**34**

* *Data collected around 1100 on 04 December 2014 by Peter Davey/HGNG*

Haverstock Hill disabled bay (4 cars on 3 spaces)

3.4. There are Overground and Tube stations within a reasonable walking distance from the hospital. A number of bus stops are as close or closer, serving a total of five bus routes.

London buses are generally low-floor.

The Transport Assessment fails to note that neither Belsize Park nor Hampstead Heath stations provide step-free access.

Haverstock Hill Gardens disabled bay (3 cars on 2 spaces and double-yellow)

3.5 The PTAL for the proposed Pears Building is 5 ('very good'), while *much of the wider Royal Free Hospital site has a PTAL of 4* ('good') (TA 3.30).

Nevertheless, Vectos asserts that the [present hospital]…

> *…site is highly accessible by non-car modes of transport* (TA 6.3), and…
>
> *… is highly accessible by non-car modes of transport with a PTAL of 5* (TA 8.9)

These latter statements are, strictly speaking, incorrect.

The purportedly high accessibility of the site to non-car modes of transport is apparently shown by the *very low level of staff driving to work* (TA 6.3), rather than say, being caused by on-site parking restrictions!

3.6 Columns in Tables 3.1 and 3.3 are incorrectly entitled *Average Service Frequency* (TA 3.24) and *Average Frequency* (TA 3.29) respectively. In both cases, this should read 'headway'. Further, ranges rather than means ('averages') are shown.

3.7 Though streets immediately adjacent to the RF are noted as having pedestrian crossings, kerb cut-downs and tactile paving (TA 3.17), the routes to and from the stations and stops have not been definitively audited.

3.8 Accident data (TA Appendix D) indicate a number of collisions involving pedestrians in the five years to October 2013, including a cluster at the Pond Street/South End Road intersection. Of *the 11 pedestrian incidents recorded, seven were caused by pedestrian error* (TA 3.45).

One hopes that the vehicles did not suffer damage!

Two ambulances in this queue

3.9 While *excessive speed [ ]* or *highway layout* (TA 3.45) were not considered to have contributed to the incidents, there are a number of steps that could be taken to reduce the hazards for pedestrians on the hospital's doorstep, including a shared space approach.

Notwithstanding the above, Vectos concludes that pedestrian provision is *good*.

3.10 No cyclists appear in the collision data.

4. The Proposed Pears Building

4.1 Construction of the Pears Building will require temporary and permanent losses of parking spaces for patients and visitors – 100 and 42 respectively.

While efforts will no doubt be made by the RF to convey this information to intending users, it is unlikely that it will affect the numbers of drivers seeking a parking space more than marginally. **Changes on-street will probably be undetectable**.

4.2 Table 6.1 (TA 6.2) shows the Observed (2006) and Target (2011) mode splits for the hospital.

The similarity between the numbers suggests either modest ambition or resignation in the Travel Plan.

However, the mode share for car is relatively low, and diminishing returns may have set in in terms of the effort required to reduce it further. The best hope of doing so probably lies in the retention of permits when a staff member leaves (TA 8.20).

4.3 Given the manner in which Table 6.2 was compiled, it is inevitably correct to state *that the majority of* [Pears Building research and other] *staff will arrive via public transport or other sustainable modes of transport* (TA 6.7).

4.4 Visitors to the Pears Building – including the Institute of Immunity and Transplantation, a patient hotel with 24 bedrooms, four accessible bedrooms and six apartments, plus new offices for the Royal Free Charity (TA 1.5) – are estimated to be *up to 50* on an average day (TA 6.8).

While no data has been disclosed to substantiate this figure, *up to 50* is likely to be an under-estimate.

4.5 The projected increase in visitors and patients to the expanded A&E Department from 100 000 to 140 000 annually is more than double the estimate for the Pears Building.

It is not known **whether planning permission has been sought for the expansion of A&E, nor whether permission had previously been granted for the rise from 60 000 to 100 000**.

4.6 An *expected mode split for visitors* to the Pears Building in Table 6.3 has been derived from Census data for the Method of Travel to Work (TA 6.9). This is an imaginative application, though of dubious reliability, but it is of little consequence as the estimated number is small.

4.7 It is claimed that…

> *A reduction in parking* [provision] *will ultimately decrease demand and encourage alternative modes of travel to the Hospital*

…which leads to the tautological conclusion that…

> *Therefore there is likely to be a net decrease in vehicle trips to the hospital as a result of the development proposals* (TA 6.12),

…repeated in the Summary (TA 6.13).

This may be more ingenuous that it appears! Note that **no recognition is given to the substantial increases in patient and visitor numbers concomitant with the proposed expansion of the A&E facility.**

4.8 The following paragraph replaces the hedged hope of TA 6.13 with the repeated prediction…

> *As stated earlier, a reduction in parking will ultimately decrease private vehicle trips to the Hospital and encourage alternative and sustainable models* (TA 7.1).

Again, no evidence is advanced in support of this claim. It is simply not clear how these predicted changes will occur, though the Travel Plan does indicate some potential mechanisms.

4.9 Given the very small estimates of visitors to the Pears Building, the changes in the distribution of flows and the junction modelling is inconsequential.

However, the claim in the Section Summary, that…

> *This section has demonstrated that there will be a reduction in overall vehicles trips to the hospital during the peak hours* (TA 7.14).

…is quite incorrect.

On all of the drawings of the Observed Traffic Flows (TA Traffic Figures), Fleet Road and Pond Street are transposed.

4.10 The confident assertion is made that, as…

> *the hospital is located within a Controlled Parking Zone. Therefore, there will be no parking implications for surrounding streets as a result of the development proposals* (TA 8.2).

Paras 3.3 and 3.4 of the present review indicates significant parking in the CPZ by Blue Badge holders.

A marginal increase is likely because of the Pears development alone. **There would be more significant implications were the expansion of the A&E facility to proceed**, not least because of the predominant mode of arrival.

4.11 The Pears Building is likely to create…

> *a small demand for parking among visitors …approximately seven vehicles requiring a parking space over the course of an average day* (TA 8.4).

This statement is contradicted by…

> *whilst the Pears Building will not materially increase parking demand, it will have an effect [on] parking supply* (TA 8.6).

4.12 The Parking Strategy (PS) (TA Appendix J) sets out four methods to mitigate the potential losses of parking on a temporary basis, that is, during and post construction of the proposed Pears Building.

4.12.1 Reallocation of Spaces

It is stated that…

> *Providing additional patient and visitor parking in this location ensures good access to the Hospital* (PS 10).

A net 60+ – 24 = 36+ spaces will become available for patients and visitors during construction. *Good access* will therefore be available for just that many more…

4.12.2 Alternative Parking Provision

The proposal is that remote parking would be promoted to staff, patients and visitors with shuttle buses from two sites – Brent Cross Shopping Centre and Morrisons in Chalk Farm, with *frequent services during the morning and evening peak periods* (PS 13).

The proposal appears implausible. In any event, the **complexity of these arrangements will probably deter most potential users**.

4.12.3 Demand Management

Though staff with parking permits currently have them because of *extenuating* or *in exception* (sic) circumstances (as cited in *para* 2.5 above), **somehow these will no longer apply**.

Staff departures (PS 17) are more likely to be effective in reducing parking demand over the medium to longer term.

4.12.4 Travel Plan

The Draft Travel Plan is discussed in more detail below.

4.13 Suffice to say at this point that for each of these methods **a large amount of information is intended to be provided to accomplish a relatively small reduction in parking demand**. It is doubtful that any conceivable means of dissemination would reach its target audience in a comprehensible manner. The effectiveness of this effort is likely to be limited, if discernible.

4.14 While parking is a major focus of the Transport Assessment Report, Vectos **have omitted to provide data on duration of stay**, as requested by LB Camden.

Furthermore, in order to assess the merits of this site vis-à-vis other sites owned by the RF Foundation Trust as the most appropriate for the expansion, it would be helpful for the RF (and the TA) to provide data relating to the origins of their staff, patients, and visitors.

5. The Draft Travel Plan

5.1 **The Travel Plan is only intended to apply to Hospital staff, who generate less than 40% of the traffic to and from the site**.

Nevertheless…

> *Given the transient nature of hospital visitors, no specific targets will be set for patients or visitors. However a range of measures will be implemented to encourage as far as possible the use of non-car transport modes to/from the site* (TP 4.12).

5.2 A number of initiatives undertaken by the Royal Free London NHS Foundation Trust are undoubtedly worthwhile, including the implementation of a Cycle to Work scheme and the provision of 130 cycle spaces (TP 2.19).

5.3 The Draft Travel Plan contradicts itself in relation to the PTAL for the site at TP 2.12 and TP 2.20.

The latter paragraph fails to distinguish the PTAL for the proposed Pears Building (PTAL = 5) with that of the existing hospital, much of it with a PTAL = 4.

> *The Royal Free Hospital is situated within a very accessible location, which is reflected by the high PTAL (5- 'Very Good')* (TP 2.20).

5.4 Based on the Observed Mode Split (2006), a Target Mode Split was set for 2011 (TP 3.3).

The increased adoption of sustainable modes sought by the Travel Plan are within the limits of statistical error. **Any changes noticed might well be illusory**.

5.5 The Draft Travel Plan states that…

> *The modal share from the 2011 target, as outlined in Table 3.1 will be used to derive interim Travel Plan targets. If, after the baseline travel surveys have been carried out, it is found that the expected modal share is not accurate, the targets will be adjusted based on the actual modal share* (TP 3.7).

The meaning of this paragraph is unclear, given that a baseline survey was carried out in 2006.

5.6 The Travel Plan Targets (TP 4.10) are not ambitious, and again the differences are within the limits of statistical error. It is unclear as to how the effectiveness of the Travel Plan will be measured with any validity.

5.7 It is clear that the roles of the Travel Plan Coordinator (TPC) and Champions are both onerous and not readily auditable in terms of effective communication with the end-user (TP 5.7*ff*).

Again, substantial information provision is envisaged, through a number of media, including staff noticeboards (TP 5.13).

5.8 It is suggested that a more effective means of communicating the key information would be **real-time departure boards for local train and bus services** (showing walk times from their locations) positioned where staff, patients and visitors leave the hospital buildings.

5.9 The multiplicity of sustainable travel methods (TP 6.2*ff*), including different car sharing schemes, is likely to mean **very low adoption rates for any one or all of them**.

5.10 Some of the Other Measures (TP 6.13) do offer real potential – personalised journey planning (in a more pro-active manner than implied), compressing work weeks and homeworking in particular.

5.11 While monitoring of the Travel Plan is proposed, it is unlikely to be sensitive enough to assist in *judging whether the implementation or proportion of certain measures needs to be modified* (TP 7.4).

In respect of the otherwise generally very good Action Plan, some of the more expensive elements (*eg*. provision of information) will not be monitored.

6. Conclusions

6.1 The Transport Assessment Report and the constituent Vectos documents contain a number of omissions, inconsistencies and errors, many of which are of limited consequence.

6.2 The increase in the expected number of patients and visitors to the expanded A&E facility is at least twice as large as that projected for the Pears Building. Given that no information is provided on the former, it is **not possible to assess the residual cumulative impacts** (TA 5.6) **of the development as a whole**.

6.3 There is **no information provided on patient and visitor travel** which represents more than 60% of the traffic generated by the RF.

6.4 There must be some **doubt as to the accuracy of the data provided on staff travel**. There are no means of knowing how representative the data is.

The number of data points implied by the results of the self-completion questionnaire is very low for some categories. Completion of it is likely to have been conducted on a non-random basis. Errors would also be magnified when the data is scaled up.

6.5 As is common with many Travel Plans, a bureaucratic approach to its Implementation will tend to hinder its effectiveness.

By way of contrast, research has demonstrated that personalised journey planning is much more effective and efficient at producing desired outcomes than the mere provision of information.

6.6 Overall, the Transport Assessment Report is vague and superficial. It lacks both detail and depth for a development of this scale. The omission of data relating to the proposed A&E Department expansion is a major failing.

While a number of the appendices are voluminous, they indicate trivial changes. Much of the modelling and data collected is wasteful and irrelevant.

The Transport Assessment Report therefore provides scant support for the planning application.

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Photographs and Blue Badge survey data

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