PROPOSED SECONDARY SCHOOL

AT 52-53 RUSSELL SQUARE, LONDON

TRANSPORT STATEMENT

Client: Ecole Jeannine Manuel

April 2017



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CONTENTS

- 1.0 Introduction
- 2.0 The Site
- 3.0 The Proposed Development
- 4.0 Transport Policy
- 5.0 Sustainable Modes
- 6.0 Trip Impact
- 7.0 Conclusions
- Appendix 1 PTAL Assessment
- Appendix 2 TRICS Output
- Appendix 3 Pupil Location Plan

1.0 INTRODUCTION

A planning application is to be submitted to Camden London Borough Council for a change of use from office accommodation to a Secondary School at 52-53 Russell Square, London.

Stirling Maynard Transportation has been appointed by Ecole Jeannine Manuel to assess the transport impacts of the development.

This Transport Statement sets out our findings and conclusions.

2.0 THE SITE

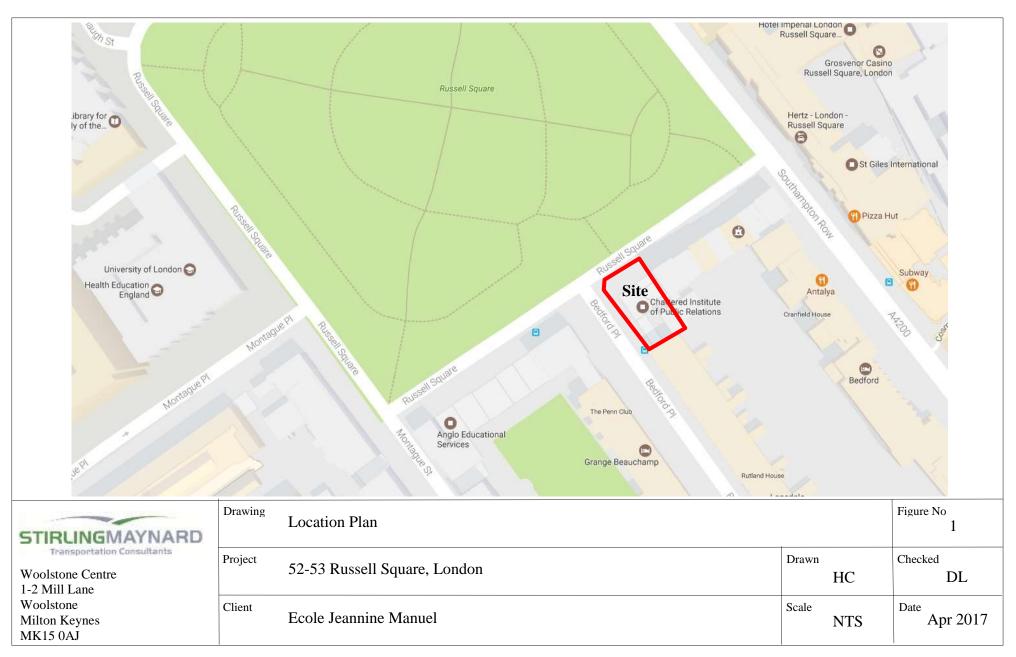
The property is located at 52-53 Russell Square, London, in the Borough of Camden. The buildings are situated on the south-eastern side of Russell Square at its junction with Bedford Place. The site location is shown in **Figure 1** overleaf.

The buildings have a frontage to both Russell Square and Bedford Place. Pedestrian entrances are available on both frontages; there is no vehicular access to the site.

Both Russell Square and Bedford Place are subject to 20mph speed limits. Both streets carry two-way traffic and are subject to parking restrictions. Parking restrictions for Resident Permit holders apply from 08.30-18.30hrs Monday to Saturday.

Both streets also have footways on either side and benefit from street lighting.







3.0 THE PROPOSED DEVELOPMENT

The proposal is for a change of use from office accommodation to a secondary school for the Ecole Jeannine Manuel.

Existing doors on Russell Square and Bedford Place will be used for pedestrian access to the school. There is no vehicular access to the site and none is proposed.

The secondary school will ultimately have capacity for up to 180 pupils aged 14-18 and will require approximately 23 full-time staff.

The school will open at 8.00am and close at 6.00pm, there are no planned pre-school or after-school activities outside these hours. The standard school day for pupils will be from 8.30am to 4.30pm, Monday to Friday. The school is not planning to open Saturday or Sunday.

Attendance times for pupils in the 16-18 age range may be more flexible, but will remain within the standard school day.

On-site facilities are not planned to include school-catering or other activities that will require regular service deliveries or collections.

4.0 TRANSPORT POLICY

4.1 National Planning Policy

The Local Transport White Paper 2011

In January 2011, the Government set out its policy direction on local transport through the Local Transport White Paper. The White Paper sets the Government's approach to shorter local journeys (i.e. trips of five miles or less) with the intention of supporting its principal wider goals of promoting economic growth and reducing carbon. There is a lot of weight given to immediate gains from local interventions, especially when it comes to job creation.

The White Paper establishes that creating economic growth and tackling climate change of reducing CO2 emissions are the primary objectives at the national level for transport. The White Paper argues that by offering sustainable travel options, local authorities can change people's travel behaviour to favour sustainable modes. Decisions on which sustainable options are appropriate are best made at the local level in partnership with local residents, businesses and delivery agencies.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was published on 27th March 2012 and provides guidance for local planning authorities and decision-takers both in drawing up development plans and as a material consideration in determining planning applications.

At the heart of the National Planning Policy Framework is a **presumption in favour of sustainable development**, which should be seen as a golden thread running through both plan-making and decision-taking.

Within the overarching roles that the planning system ought to play, there is a set of 12 core land-use planning principles that should underpin both plan-making and decision taking. From a transport perspective these include:

"actively managing patterns of growth to make the fullest possible use of public transport, walking and cycling and focus significant development in locations which are or can be made sustainable".

Paragraphs 29 to 41 of the NPPF set out the Government's policies for promoting sustainable transport. Of particular relevance to this development proposal are Paragraphs 29, 32, and 35.

Paragraph 29 advises that:

"Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas."

Paragraph 32 advises, inter alia, that:

Plans and decisions should take account of whether:

the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;

safe and suitable access to the site can be achieved for all people; and

improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are <u>severe</u>.

Paragraph 35 advises that:

"Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to:

accommodate the efficient delivery of goods and supplies;

give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;

create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;

incorporate facilities for charging plug-in and other ultra-low emission vehicles; and

consider the needs of people with disabilities by all modes of transport."

4.2 Local Transport Policy

Mayor's Transport Strategy

"The strategy has a clear vision for London's transport system. It should: Surpass those of global cities Provide access to opportunities for all its people and enterprises Achieve the highest environmental standards Lead the world in its approach to tackling the urban transport challenges of the 21st century"

The strategy has six key goals:

"1. Support economic development and population growth

Our city is growing fast. London needs a transport system that connects people to jobs and allows people, goods and services to move easily within and through the capital.

Around 3.1 million more people – and over 1.4 million more jobs – are expected to live in Greater London by 2050. This will lead to millions more trips each day. Our plans to meet the transportation needs of this increased population include: Upgrading the Tube to allow more trains to run through the central parts of the city Unprecedented investment plan to modernise the road network Better river and rail services, including Crossrail, Thameslink, and improvements to

the DLR

2. Enhance the quality of life for all Londoners

Transport has a bearing on all of our health and wellbeing. This can be directly, through road collisions and air pollutants, but also indirectly, through stress and physical activity. We're working to make travel in the capital simpler and more pleasant.

New trains, stations and buses mean a cleaner and less crowded journey for passengers. We're also introducing more journey planning information to make getting from A to B easier for all.

We're designing and redesigning public spaces to encourage more Londoners to walk and cycle. Our efforts in keeping the city's streets cleaner means we are all benefitting from less clutter, and a better balance for road users.

The Low Emission Zone, which deters high polluting vehicles, is helping to improve air quality. The Mayor recently set out proposals for a central London Ultra Low Emission Zone from 2020.

3. Improve the safety and security of all Londoners

We want to make sure people feel safe when cycling, walking, driving or using public transport.

Despite low crime levels on public transport, fear of crime and antisocial behaviour remain barriers to travel for some people. The Mayor is reducing the rate of crime and the fear of crime on our transport network through better policing. We are focusing on times and places when people feel particularly vulnerable, for example, at night. The Mayor has also set out plans to improve road safety. Read more about the Road Safety Force.

4. Improve transport opportunities for all Londoners

We are working to make sure our transport system is accessible and easy to use for everyone.

Hundreds of millions of pounds has been invested over the last few years to ensure that London has the most accessible transport network in the country and one of the most accessible transport networks anywhere in the world. Read more about accessible transport in London.

5. Tackling deprivation and supporting growth

Some of London's most deprived areas have poor transport links. Extended lines and new stations will connect some of London's more isolated areas, particularly in the east of the city.

The London Plan - the Mayor's spatial development strategy – identifies areas that have a greater need for investment as London continues to grow. Transport planning will be at the heart of new developments to make sure that new housing and employment is supported by reliable public transport. Read more about transport investment in growth areas.

6. Reduce contribution to climate change and improve resilience

We aim to reduce London's CO2 emissions by 60% by 2025. Cleaning up our transport system is a major part of this effort. Measures include:

Encouraging walking and cycling as a green way to travel

Speeding up the introduction of low carbon road vehicles, including electric vehicles and the next generation of buses

Introducing regenerative braking as part of tube improvements, saving up to 25% of electricity used

Tightening the standards of the Low Emission Zone and introducing an "Ultra Low Emission Zone"

Local Transport Plan

The Greater London Authority Act 1999 requires London Boroughs to produce a Local Implementation Plan (LIP), which demonstrates how each authority will deliver the Mayor of London's Transport Strategy, and the Central and North Sub-Regional Transport Plans.

The Camden Borough Council Transport Strategy is a statutory document which sets out the Council's strategy for transport in the borough. The Transport Strategy came into effect in August 2011.

Local Transport Plan Objectives

1. Reduce motor traffic levels and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a 'low carbon and low waste borough'

2. Encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden

3. Improve road safety and personal security for people travelling in Camden

4. Effectively manage the road network to manage congestion, improve reliability and ensure the efficient movement of goods and people

5. Develop and maintain high quality, accessible public streets and spaces and recognise that streets are about more than movement

6. Ensure the transport system supports Camden's sustainable growth and regeneration as well as enhancing economic and community development

7. Ensure the transport systems supports access to local services and facilities reduces inequalities in transport and increases social inclusion.

8. Ensure that the provision of parking is fair and proportionate by considering the needs of all users, whilst also encouraging sustainable travel choices.

9. Support the delivery of a successful London 2012 Olympic and Paralympic Games



Camden Borough Council Development Policies

Camden's Local Development Framework "Camden Development Policies 2010-2025" sets out six transport policies for promoting sustainable and efficient transport:

- DP16 The transport implications of development
- DP17 Walking, cycling and public transport
- DP18 Parking standards and limiting the availability of car parking
- DP19 Managing the impact of parking
- DP20 Movement of goods and materials
- DP21 Development connecting to the highway network

5.0 SUSTAINABLE MODES

5.1 PTAL Assessment

A PTAL (Public Transport Accessibility Level) assessment for a location in London provides a score which indicates how accessible it is by public transport. An assessment can be carried out using a tool provided by Transport for London.

PTAL scores range from 0, indicating the lowest level of accessibility through to 6b indicating the highest possible level. The proposed location for the school was assessed by the TfL PTAL tool as 6b, i.e. the highest possible accessibility level.

A copy of the PTAL assessment is attached as **Appendix 1**.

5.2 Walking & Cycling

Walking is a highly sustainable and efficient mode of transport and is recommended for most trips of less than two kilometres in length. Cycling is also highly sustainable and is recommended for trips of less than five kilometres. The two and five kilometre catchments for the school are shown in **Figure 2**.

All local roads benefit from a good system of footways with numerous controlled crossing locations, pedestrian refuges and dropped kerb crossings with tactile paving. The quality of walking routes in the area is generally very good.

Cycling in the area is mainly on road; however, there are several dedicated cycle lanes on streets near to the site. Cycle parking exists on Russell Square opposite the school site; in addition, the school is proposing to provide 12 cycle spaces as part of its Travel Plan proposals.

5.3 **Public Transport**

As shown in the PTAL assessment (Appendix 1) there are numerous high-frequency bus routes and London Underground trains serving the school site.

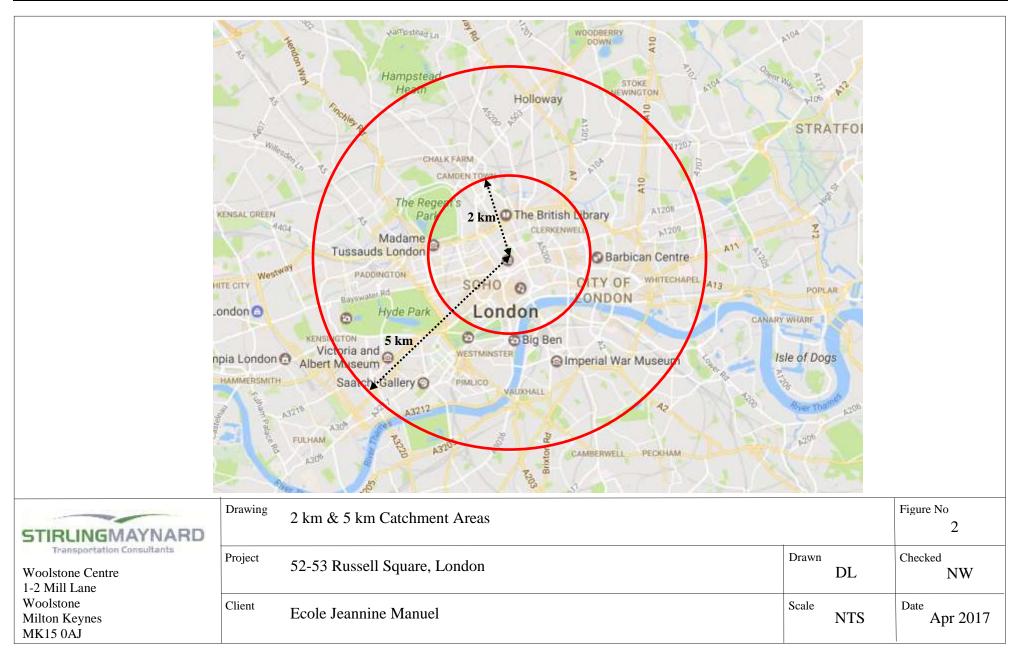
The nearest bus stops to the School listed in the PTAL assessment are in Russell Square (75m), Southampton Row (200m) and Bloomsbury Square (500m). London Underground services are available from Russell Square (400m), Holborn (700m) and Goodge Street (900m).

In addition, mainline train services are available at Euston, St Pancras and Kings Cross stations, all of which are located approximately 1km north of the school site.

In summary therefore, there are multiple opportunities for travel to and from the site by sustainable modes. Shorter journeys to the school can easily be undertaken on foot or by bicycle, with longer journeys easily achieved by public transport.



Proposed Secondary School, 52-53 Russell Square, London Transport Statement



6.0 TRIP IMPACT

6.1 Person Trips

An assessment of the person trips that would typically be generated by the current use class (B1 office) has been made using the TRICS database. The output of the TRICS assessment is attached as **Appendix 2**.

The person trip rates (per 100m2) produced by the TRICS assessment are shown in **Table 1** below. **Table 2** shows the total person trips that are likely to be generated by the use of the buildings for B1 office (based on 1100m2 of floorspace).

	IN	OUT	TOTAL
AM PEAK (8-9)	2.692	0.236	2.928
PM PEAK (4-5)	0.635	1.351	1.986
TOTAL DAILY	16.818	15.887	32.705

Table 2 – Actual Person Trips based on $1100m^2$ of B1 Office

	IN	OUT	TOTAL
AM PEAK (8-9)	30	3 33	
PM PEAK (4-5)	7	15	22
TOTAL DAILY	185	175	360

The proposed school use will typically generate the person trips shown in **Table 3** below. These figures are based on 180 pupils and 23 staff with 90% of both arriving during the AM peak hour (8am-9am) and 90% of pupils departing during the PM peak (4pm-5pm).



This is considered to be a robust comparison as actual arrival and departure times are likely to be less concentrated.

	IN	OUT	TOTAL
AM PEAK (8-9)	183	0	183
PM PEAK (4-5)	0	162	162
TOTAL DAILY	203	203	406

Table 3 – School use potential Person Trips

The draft School Travel Plan has made an assessment of the likely mode split for pupils and staff at the new school. This assessment is based on information for the current school premises nearby at Bedford Square.

The Travel Plan indicates a likely modal split for pupils and staff as shown in **Table 4** below.

MODE	STAFF (23)	PUPILS (180)	TRIPS		
			AM PM		TOTAL
WALK	30%	20%	39	32	86
CYCLE	10%	0%	2	0	4
BUS	30%	35%	35% 63 57		140
TUBE	30%	35%	63 57		140
CAR	0%	10% 16 16		36	
TOTAL	100%	100%	193	162	406

Table 4 – Predicted Modal Split for Staff and Pupils

Table 4 shows how the person trips associated with the school will be distributed across the modes. For public transport there will be approximately 60 bus and tube journeys in the 8am-9am and 4pm-5pm peaks. These will be distributed across several services.

Although this distribution is not known in detail due to the school not having opened, the plan in **Appendix 3** shows the geographic distribution of pupils at the current school site. This shows a relatively dispersed catchment, which supports the assertion that trips will be distributed across several services.

6.2 Vehicle Trips

The TRICS assessment in Appendix 1 also shows the likely vehicle trip generation for a typical B1 office use. **Table 5** below shows the TRICS trip rates and **Table 6** shows the vehicle trips generated by an office use in the buildings that are proposed for a change of use.

	IN	OUT	TOTAL
AM PEAK (8-9)	0.153	0.041	0.194
PM PEAK (4-5)	0.133	0.133	0.266
TOTAL DAILY	1.688	1.646	3.334

Table 5 – TRICS Vehicle Trip rates for B1 Office (per 100m²)

Table 6 – Vehicle Trips based on 1100m² of B1 Office

	IN	OUT	TOTAL
AM PEAK (8-9)	2	0.5 2.5	
PM PEAK (4-5)	1.5	1.5	3
TOTAL DAILY	19	18	37

By using the same assumptions as those used in Tables 3 and 4, the potential vehicle trips generated by the school are shown in **Table 7**. The Table shows that these are very similar to the vehicle trips potentially generated by the current office use.

	IN	OUT	TOTAL
AM PEAK (8-9)	16	16 0 16	
PM PEAK (4-5)	0	16	16
TOTAL DAILY	18	18	36

Table 7 – School use potential Vehicle Trips

6.3 Summary

An assessment of the trips generated by the current use and the proposed development has been carried out using the TRICS database. This assessment shows that vehicle trips before and after the change of use are likely to be very similar. For person trips there is a peak hour increase, but this is spread across modes with public transport catering for approximately 60 additional trips across several bus services and a similar increase on local tube services.

It should be noted that the pupil trips would most likely be on local transport networks already, with other schools as the destination. It is very unlikely that these trips are new to the network.

The PTAL assessment for the school site produced an accessibility level of 6b. This means the proposed school site is in one of the highest ranked accessible locations in London.

As a result it is concluded that there are no transport issues that would significantly impact on the proposed use of the site as a secondary school.

7.0 CONCLUSIONS

The proposed secondary school on this site will add a small number of peak hour trips to local public transport services. These trips will be spread across several bus and tube services and will not have a significant impact as a result.

Vehicle trips to the site will remain at a very similar level to those potentially generated by the current use. There is no vehicular access to the site.

Access to the site for pedestrians and cyclists will remain as per the current arrangement. Local walking facilities are very good, with high quality routes that benefit from controlled or refuge-assisted crossings in many locations. There are several dedicated cycle lanes locally and additional cycle parking is proposed as part of the Travel Plan to encourage staff to cycle.

Consequently, it is considered that excellent opportunities exist to travel by modes other than the private car and that the use of this site as a school would not have a detrimental impact on local transport networks.

APPENDIX 1

PTAL ASSESSMENT





PTAL output for Base Year 6b 52 Russell Square, Bloomsbury, London WC1B 4HP, UK Easting:

530177, Northing: 181909

Grid Cell: 87878

Report generated: 03/04/2017

Calculation Parameters	
Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75



Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	BLOOMSBURY SQUARE	8	486.49	10	6.08	5	11.08	2.71	0.5	1.35
Bus	BLOOMSBURY SQUARE	242	486.49	6.5	6.08	6.62	12.7	2.36	0.5	1.18
Bus	BLOOMSBURY SQUARE	38	486.49	10	6.08	5	11.08	2.71	0.5	1.35
Bus	BLOOMSBURY SQUARE	1	486.49	8	6.08	5.75	11.83	2.54	0.5	1.27
Bus	BLOOMSBURY SQUARE	19	486.49	8	6.08	5.75	11.83	2.54	0.5	1.27
Bus	BLOOMSBURY SQUARE	171	486.49	7.5	6.08	6	12.08	2.48	0.5	1.24
Bus	BLOOMSBURY SQUARE	55	486.49	10	6.08	5	11.08	2.71	0.5	1.35
Bus	RUSSELL SQUARE STH SIDE	98	76.4	9	0.96	5.33	6.29	4.77	1	4.77
Bus	RUSSELL SQUARE STH SIDE	X68	76.4	4	0.96	9.5	10.46	2.87	0.5	1.43
Bus	RUSSELL SQUARE STH SIDE	188	76.4	8	0.96	5.75	6.71	4.47	0.5	2.24
Bus	SOUTHAMPTON RW RUSSELL S	59	216.85	10	2.71	5	7.71	3.89	0.5	1.95
Bus	SOUTHAMPTON RW RUSSELL S	91	216.85	9	2.71	5.33	8.04	3.73	0.5	1.86
Bus	SOUTHAMPTON RW RUSSELL S	68	216.85	9	2.71	5.33	8.04	3.73	0.5	1.86
Bus	SOUTHAMPTON RW RUSSELL S	168	216.85	9	2.71	5.33	8.04	3.73	0.5	1.86
LUL	Goodge Street	'Morden-Edgware '	938.73	4.67	11.73	7.17	18.91	1.59	0.5	0.79
LUL	Goodge Street	'HighBarnet-Morden '	938.73	0.33	11.73	91.66	103.39	0.29	0.5	0.15
LUL	Goodge Street	'Kennington-Edgware '	938.73	14.67	11.73	2.79	14.53	2.06	0.5	1.03
LUL	Goodge Street	'HighBarnet-Kenningt '	938.73	5.33	11.73	6.38	18.11	1.66	0.5	0.83
LUL	Goodge Street	'MillHill-Morden '	938.73	1.67	11.73	18.71	30.45	0.99	0.5	0.49
LUL	Goodge Street	'MillHillE-Kenningt '	938.73	1.67	11.73	18.71	30.45	0.99	0.5	0.49
LUL	Russel Square	'Cockfosters-LHRT4LT '	391.78	4.67	4.9	7.17	12.07	2.49	0.5	1.24
LUL	Russel Square	'RayLane-Cockfosters '	391.78	3.67	4.9	8.92	13.82	2.17	0.5	1.09
LUL	Russel Square	'LHRT4LT-ArnosGrove '	391.78	4.67	4.9	7.17	12.07	2.49	0.5	1.24
LUL	Russel Square	'ArnosGrove-RayLane '	391.78	0.33	4.9	91.66	96.56	0.31	0.5	0.16
LUL	Russel Square	'Oakwood-RayLane '	391.78	0.33	4.9	91.66	96.56	0.31	0.5	0.16
LUL	Russel Square	'Nthfields-Cockfoster'	391.78	1	4.9	30.75	35.65	0.84	0.5	0.42
LUL	Russel Square	'LHRT5-Cockfosters '	391.78	6	4.9	5.75	10.65	2.82	1	2.82
LUL	Russel Square	'Uxbridge-Cockfosters'	391.78	3.67	4.9	8.92	13.82	2.17	0.5	1.09
LUL	Russel Square	'Ruislip-Cockfosters '	391.78	2.33	4.9	13.63	18.52	1.62	0.5	0.81
LUL	Russel Square	'ArnosGrove-Uxbridge '	391.78	1	4.9	30.75	35.65	0.84	0.5	0.42
LUL	Russel Square	'Oakwood-Uxbridge '	391.78	0.33	4.9	91.66	96.56	0.31	0.5	0.16
LUL	Russel Square	'Oakwood-Ruislip '	391.78	0.33	4.9	91.66	96.56	0.31	0.5	0.16
LUL	Holborn	'Ealing-Epping '	696.29	3	8.7	10.75	19.45	1.54	0.5	0.77
LUL	Holborn	'Epping-Wruislip '	696.29	3	8.7	10.75	19.45	1.54	0.5	0.77
LUL	Holborn	'RuislipGar-Epping '	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'WhiteCity-Epping '	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15

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LUL	Holborn	'Epping-NActon '	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'Northolt-Epping '	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'Debden-WRuislip '	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15
LUL	Holborn	'WhiteCity-Debden '	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15
LUL	Holborn	'Debden-Northolt '	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'RuislipGdns-Debden '	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15
LUL	Holborn	'Loughton-WRuislip '	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'NActon-Loughton '	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'RuislipGdns-Loughton'	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'Loughton-WhiteCity '	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'Loughton-Northolt '	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15
LUL	Holborn	'Ealing-Loughton '	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'Ealing-NewburyPark '	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'WRuislip-NewburyPark'	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15
LUL	Holborn	'NActon-NewburyPark '	696.29	0.33	8.7	91.66	100.36	0.3	0.5	0.15
LUL	Holborn	'Hainault-Ealing '	696.29	5.33	8.7	6.38	15.08	1.99	0.5	0.99
LUL	Holborn	'Hainault-Nacton '	696.29	1.33	8.7	23.31	32.01	0.94	0.5	0.47
LUL	Holborn	'Hainault-WRuislip '	696.29	3.33	8.7	9.76	18.46	1.62	0.5	0.81
LUL	Holborn	'RuislipGdns-NP-Hain '	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'Hainault-WhiteCity '	696.29	1.67	8.7	18.71	27.42	1.09	0.5	0.55
LUL	Holborn	'Hainault-NP-Northolt'	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'GrangeHill-WD-Eal '	696.29	1	8.7	30.75	39.45	0.76	0.5	0.38
LUL	Holborn	'GrangeHill-Wdfd-Whit'	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'GrangeHill-Wdfd-WRsp'	696.29	0.67	8.7	45.53	54.23	0.55	0.5	0.28
LUL	Holborn	'ArnosGrove-Nthfields'	696.29	3	8.7	10.75	19.45	1.54	0.5	0.77

Total Grid Cell AI: 49.63

PTAL: 6b

APPENDIX 2

TRICS ASSESSMENT

TRICS 7.4.1

Trip Rate Parameter:	Gross floor area								
Filtering Summary									
Land Use	02/A EMPLOYMENT/OFFICE								
Selected Trip Rate Calculation Parameter Range	1386-5000 sqm GFA								
Actual Trip Rate Calculation Parameter Range	1386-4062 sqm GFA								
Date Range	Minimum: 01/01/	08	Maximum: 29/11/13						
Days of the week selected	Monday Wednesday Thursday Friday		1 1 1						
Main Location Types selected	Town Centre Edge of Town Ce	ntre	2 2						
Population <1 Mile ranges selected	25001 to 50000 50001 to 100000		1 3						
Population <5 Mile ranges selected	500001 or more		4						
Car Ownership <5 Mile ranges selected	0.5 or Less 0.6 to 1.0		3 1						
PTAL Rating	No PTAL Present 4 Good 6b (High) Excelle		2 1 1						
TRIP RATE CALCULATION SELECTION PA	RAMETERS								
Land Use	02 - EMPLOYMENT								
Category	A - OFFICE								
Selected regions and areas:	GREATER LONDON								
	CI	CITY	OF LONDON	2 days					
	CN	CAMI	DEN	1 days					
	SK	SOUT	UTHWARK 1 days						

Secondary Filtering selection:	
Parameter:	Gross floor area
Actual Range:	1386 to 4062 (units: sqm)
Range Selected by User:	1386 to 5000 (units: sqm)
Public Transport Provision:	
Selection by:	Include all surveys
Date Range:	01/01/08 to 29/11/13
Selected survey days:	
Monday	1 days
Wednesday	1 days
Thursday	1 days
Friday	1 days
Selected survey types:	
Manual count	4 days
Directional ATC Count	0 days
Selected Locations:	
Town Centre	2
Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	0
Edge of Town	0
Neighbourhood Centre	0
Free Standing (PPS6 Out of Town)	0
Not Known	0
Selected Location Sub Categories:	
Industrial Zone	0
Commercial Zone	2
Development Zone	0
Residential Zone	0
Retail Zone	0
Built-Up Zone	2
Village	0
Out of Town	0
High Street	0
No Sub Category	0
Use Class:	
B1	4 days
Population within 1 mile:	-
25,001 to 50,000	1 days
50,001 to 100,000	3
Population within 5 miles: 500,001 or More	days 4
	days
Car ownership within 5 miles: 0.5 or Less	3
	days
0.6 to 1.0	1 days
Travel Plan:	
No	4 days
PTAL Rating:	
No PTAL Present	2

4 Good 6b (High) Excellent	days 1 days 1 days				
LIST OF SITES relevant to selection					
Site(1):	CI-02-A-01	Gross floor area:	1386 sqm		
Development Name:	OFFICES				
Location:	BANK				
Postcode:	EC4N 6JJ	Number of Employees	: 62		
Main Location Type:	Town Centre	Survey Date:	21/10/2009		
Sub-Location Type:	Built-Up Zone	Survey Day:	Wednesday		
PTAL:	6b (High) Excellent	Parking Spaces:	2		
Site(2):	CI-02-A-03	Gross floor area:	1951 sqm		
Development Name:	OFFICES				
Location:	CITY OF LONDON				
Postcode:	EC3R 8AJ	Number of Employees	: 236		
Main Location Type:	Town Centre	Survey Date:	29/11/2013		
Sub-Location Type:	Commercial Zone	Survey Day:	Friday		
PTAL:	4 Good	Parking Spaces:	0		
Site(3):	CN-02-A-01	Gross floor area:	4062 sqm		
Development Name:	OFFICES				
Location:	HOLBORN				
Postcode:	EC1N 6SN	Number of Employees	: 469		
Main Location Type:	Edge of Town Centre	Survey Date:	23/10/2008		
Sub-Location Type:	Built-Up Zone	Survey Day:	Thursday		
PTAL:	n/a	Parking Spaces:	40		
Site(4):	SK-02-A-02	Gross floor area:	2371 sqm		
Development Name:	OFFICES				
Location:	ROTHERHITHE				
Postcode:	SE16 2XB	Number of Employees	: 145		
Main Location Type:	Edge of Town Centre	Survey Date:	20/10/2008		
Sub-Location Type:	Commercial Zone	Survey Day:	Monday		
PTAL:	n/a	Parking Spaces:	30		

TRIP RATE for Land Use 02 -EMPLOYMENT/A - OFFICE Calculation Factor: 100 sqm Count Type: VEHICLES

	ARRIVALS		LS	DEPARTURES						TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	s GFA	Rate	Day	s GFA	Rate	
07:00-07:30	4	2443	0.01	4	2443	0	4	2443	0.01	
07:30-08:00	4	2443	0.082	4	2443	0.031	4	2443	0.113	
08:00-08:30	4	2443	0.061	4	2443	0.031	4	2443	0.092	
08:30-09:00	4	2443	0.092	4	2443	0.01	4	2443	0.102	
09:00-09:30	4	2443	0.102	4	2443	0.02	4	2443	0.122	
09:30-10:00	4	2443	0.143	4	2443	0.051	4	2443	0.194	
10:00-10:30	4	2443	0.102	4	2443	0.061	4	2443	0.163	
10:30-11:00	4	2443	0.072	4	2443	0.082	4	2443	0.154	
11:00-11:30	4	2443	0.102	4	2443	0.102	4	2443	0.204	
11:30-12:00	4	2443	0.072	4	2443	0.072	4	2443	0.144	
12:00-12:30	4	2443	0.072	4	2443	0.082	4	2443	0.154	
12:30-13:00	4	2443	0.082	4	2443	0.092	4	2443	0.174	
13:00-13:30	4	2443	0.072	4	2443	0.092	4	2443	0.164	
13:30-14:00	4	2443	0.031	4	2443	0.061	4	2443	0.092	
14:00-14:30	4	2443	0.133	4	2443	0.092	4	2443	0.225	
14:30-15:00	4	2443	0.072	4	2443	0.061	4	2443	0.133	
15:00-15:30	4	2443	0.061	4	2443	0.051	4	2443	0.112	
15:30-16:00	4	2443	0.02	4	2443	0.051	4	2443	0.071	
16:00-16:30	4	2443	0.061	4	2443	0.041	4	2443	0.102	
16:30-17:00	4	2443	0.072	4	2443	0.092	4	2443	0.164	
17:00-17:30	4	2443	0.082	4	2443	0.143	4	2443	0.225	
17:30-18:00	4	2443	0.041	4	2443	0.113	4	2443	0.154	
18:00-18:30	4	2443	0.051	4	2443	0.154	4	2443	0.205	
18:30-19:00	4	2443	0	4	2443	0.061	4	2443	0.061	
Daily Trip Rates:			1.688			1.646			3.334	

TRIP RATE for Land Use 02 -EMPLOYMENT/A - OFFICE Calculation Factor: 100 sqm Count Type: TOTAL PEOPLE

	ARRIVALS		LS	DEPARTURES						TOTALS
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	GFA	Rate	Days	s GFA	Rate	Day	s GFA	Rate	
07:00-07:30	4	2443	0.348	4	2443	0.031	4	2443	0.379	
07:30-08:00	4	2443	0.604	4	2443	0.041	4	2443	0.645	
08:00-08:30	4	2443	0.993	4	2443	0.113	4	2443	1.106	
08:30-09:00	4	2443	1.699	4	2443	0.123	4	2443	1.822	
09:00-09:30	4	2443	1.894	4	2443	0.123	4	2443	2.017	
09:30-10:00	4	2443	1.249	4	2443	0.317	4	2443	1.566	
10:00-10:30	4	2443	0.532	4	2443	0.399	4	2443	0.931	
10:30-11:00	4	2443	0.45	4	2443	0.379	4	2443	0.829	
11:00-11:30	4	2443	0.389	4	2443	0.348	4	2443	0.737	
11:30-12:00	4	2443	0.389	4	2443	0.583	4	2443	0.972	
12:00-12:30	4	2443	1.024	4	2443	1.3	4	2443	2.324	
12:30-13:00	4	2443	1.146	4	2443	1.423	4	2443	2.569	
13:00-13:30	4	2443	1.3	4	2443	1.443	4	2443	2.743	
13:30-14:00	4	2443	0.962	4	2443	0.768	4	2443	1.73	
14:00-14:30	4	2443	1.085	4	2443	0.727	4	2443	1.812	
14:30-15:00	4	2443	0.553	4	2443	0.604	4	2443	1.157	
15:00-15:30	4	2443	0.614	4	2443	0.44	4	2443	1.054	
15:30-16:00	4	2443	0.307	4	2443	0.655	4	2443	0.962	
16:00-16:30	4	2443	0.328	4	2443	0.778	4	2443	1.106	
16:30-17:00	4	2443	0.307	4	2443	0.573	4	2443	0.88	
17:00-17:30	4	2443	0.246	4	2443	1.29	4	2443	1.536	
17:30-18:00	4	2443	0.133	4	2443	1.781	4	2443	1.914	
18:00-18:30	4	2443	0.194	4	2443	1.167	4	2443	1.361	
18:30-19:00	4	2443	0.072	4	2443	0.481	4	2443	0.553	
Daily Trip Rates:			16.818			15.887			32.705	

APPENDIX 3

PLOT OF PUPIL LOCATIONS

Plot of pupil locations (data from Bedford Square premises)

