



**VISITORS TO THE ROYAL PARKS:
RESULTS OF STEADY STATE COUNT
(AUGUST 2007-JULY 2008)**

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Table of Contents

1. EXECUTIVE SUMMARY 3
2. INTRODUCTION..... 3
3. METHODOLOGY 5
4. THE FINDINGS 7
5. ANALYSIS OF FINDINGS 11
6. BOUNDARY SURVEY..... 17
8. CONCLUSIONS AND RECOMMENDATIONS 22
APPENDIX 24

1. EXECUTIVE SUMMARY

London Metropolitan University conducted this study on behalf of The Royal Parks Agency between August 2007 and July 2008 with the aim of providing valid and reliable visitor numbers. Over this period data was collected in the following parks: Richmond Park, Bushy Park, Greenwich Park, The Regent's Park and Primrose Hill. This project comprises the second half of a study that began in August 2006 on the four Royal Parks in central London: The Green Park, St James's Parks, Hyde Park and Kensington Gardens. The second study showed that there had not been a highly significant increase, with the exception of The Regent's Park, in the number of visitors to these parks in contrast to the central London parks since the university began collecting data on visitor arrivals in the mid 1990s. The reasons why there has not been such a marked increase since 1995 are explored in the report.

This study made use of a Steady State count using a customised formula that was devised in January 2007 to calculate the number of visitors to the central London parks. In addition, a boundary survey of all the Royal Parks was undertaken examining both formal and informal exits and entrances to obtain a clearer picture of the complexities of the parks. Advice was sought from industrial and university sources via the *Sensors and Instrumentation Knowledge Transfer Network* on the installation of automated counters to provide a cost effective and sustainable solution for monitoring visitor arrivals. The consensus is that, while a reliable customised system could be devised for the Royal Parks, it would be prohibitively expensive because of the unique nature and complexities of the parks. It is therefore proposed that a consortium of industry providers, universities, the Royal Parks and other outdoor attractions should be formed to bid for funding to support experimentation to find a cost effective long-term solution.

2. INTRODUCTION

The Royal Parks comprise: St James's Park, The Green Park, Hyde Park, Kensington Gardens, The Regent's Park (with Primrose Hill), Greenwich Park, Richmond Park and Bushy Park. This study comprises the second half of a research project that ran between August 2006 and July 2007 with visitor counts in The Green Park, St James's Parks, Hyde Park and Kensington Gardens. The second half of the study began in August 2007 and visitor data was collected in the following parks: Richmond Park, Bushy Park, Greenwich Park, The Regent's Park and Primrose Hill. For comparative purposes sample studies had already been conducted in these five parks and the figures that were collected before the second study had begun are used to help analyse the second set of data. A diary of counting days was kept noting, in particular, weather conditions and any activities that might have a bearing on the data. The report also refers to other factors, such as changes in transport and parking policies, over which the Royal Parks management have no control, that also had an impact on the level of visitation.

As is the case with the four central London parks that were the subject of the first part of the study visitors use the Royal Parks for a wide variety of reasons. The activities pursued in these open spaces include both individual (e.g. roller-blading, cycling, jogging) and team games (e.g. football, rugby, baseball, cricket), as well as less energetic activities such as attending exhibitions, quiet relaxation, meeting friends, photography, lunch breaks out of

the office and family, picnicking, dining in cafes and restaurants, and watching wildlife. In common with the central London parks these parks are chosen as a scenic and healthy route to work, though the numbers of people doing so lay outside the remit of this study.

In common with the central parks the outer Royal Parks make a major contribution to London's cityscape and the capital's reputation and profile as a visitor destination and have an international reputation for excellence in landscape design and management. Throughout the course of this study two of these parks in particular have been the subject of intense media scrutiny: Richmond in relationship to scenic views and plans to develop tall buildings in central London; Greenwich in relation to plans to stage the Olympics' equestrian events. Whether or not this coverage had any impact on visitor numbers is not ascertainable through this study and mention of a high level of media interest is included here to underpin the important status of the parks that was mentioned in the previous report. Like the central London Royal Parks, the outer parks are valuable community facilities for residents and workers and, as free and inclusive facilities that contribute to London's diversity goals. The Royal Parks also make a national economic contribution as major tourist attractions that feature prominently in the marketing of the UK as an international destination and contribute to the economy of London in a variety of ways, not least in the way they underpin the values of the properties that surround them. The contribution that all these parks make to the health of residents of London is undoubtedly high, though not yet systematically measured.

The parks are managed by The Royal Parks Agency, an executive agency of the Department for Culture, Media and Sport. In 2007/2008 the Royal Parks Agency's grant from Government was £17.464 Million and the parks self generated income was £10.326 Million. Together the Royal Parks comprise one of the UK's major historical, sporting, cultural, environmental and leisure resources and can be counted among the country's leading visitor attractions. As a result of studies conducted by the University of North London (now London Metropolitan University) it was clear that the Royal Parks were major destinations that attracted millions of visitors each year (see Table 1).

Table 1 Estimated Total Visits to Park for 1994 and 1995

Park	Millions of Visitors 1994	Millions of Visitors 1995
The Regent's Park	4.1	3.9
Primrose Hill	1.1	1.1
St. James's Park	5.7	5.5
The Green Park	3.6	3.4
Hyde Park	4.7	4.7
Kensington Gardens	2.8	2.5
Greenwich Park	3.5	3.4
Bushy Park	1.7	1.6
Richmond Park	2.6	2.6
Total	29.8	28.7

By the 21st century the overall number of visitors had risen sharply, as was shown by the study of the central London parks that was conducted by London Metropolitan University between August 2006 and July 2007 (see Table 2). The reasons for this rise were analysed

in the report of the first study (Hitchcock, Curson & Parravicini, 2007). There were no reasons, however, to assume that a similar rise could be anticipated in the parks that were the subject of the second study.

Table 2 Annual Visitor Figures August 2006–July 2007

Park	First Quarterly (August–November) Figures	Visitor Figures for November (Exit Survey and 15% Shoulder)	Estimated Figures for December Based on Mid Point Analysis	Result of 7 Months Steady State Count	Annual Figures August 2006–July 2007
The Green Park	1,890,000	343,628	361,329	3,739,188	6,304,145
St James's Park	2,160,000	336,990	300,005	3,629,095	6,426,090
Kensington Gardens	560,000	332,850	319,575	3,510,871	4,219,296
Hyde Park	2,260,000	345,000	327,276	4,172,025	7,104,301

3. METHODOLOGY

The Visitor Count Study

The aim of both studies was to provide valid and reliable visitor numbers to the Royal Parks. Data was collected in the central London parks between August 2006 and July 2007, and then the counts were extended to the remaining parks (Regent's Park and Primrose Hill, Greenwich Park, Bushy Park and Richmond Park) between August 2007 and July 2008. Baseline data for comparative purposes had been collected in sample studies for the outer parks during the course of the first study. Data on visitation was also collected in the central parks in December 2007 for comparative reasons and to cover a gap in the previous study. For the reasons explained in the first report, a manual exit survey was replaced by a Steady State count, but with regard to the outer parks there were the following additional reasons for not using an exit survey.

While the outer parks do not suffer from as widespread use of informal exits and entrances as the inner London parks, it remains difficult to count people leaving these parks because of surges at peak times, as is especially the case with Greenwich Park.

The boundaries of The Regent's Park are complicated because they are cut through by roads that link two thoroughfares, the inner and outer rings, making it difficult to ascertain when visitors are actually entering and leaving the parks. Visitors can moreover pass between different parts of the park, increasing the risk of double counting.

In the case of Bushy Park and Richmond Park an Exit Survey would be complicated by the fact that visitors enter via different modes of transport: car, coach, motorcycle, horseback, bicycle and on foot. This also applies to a lesser extent to Greenwich Park.

Even in parks with apparently unambiguous boundaries such as Greenwich, Richmond and Primrose Hill the picture is complicated by the presence of privately owned entrances, as well as entrances that appear to be under the management of other governmental agencies,

such as the National Maritime Museum and the London Borough of Camden, and not the Royal Parks. It remains unclear whether entrances and exits to the Royal Parks that are not managed by the Royal Parks Agency abide by the same opening and closing times.

The Steady State Count

For the above reasons, as well as consistency with the first half of the study, it was agreed that the Steady State count should be adopted with regard to the outer parks. In the sample studies each of the parks had been divided into segments and the counters walked a previously arranged beat following a timed start to simply count everybody in each park. The decision was taken to continue using the following custom-made formula that London Metropolitan University's Statistics Operational Research and Mathematics Centre designed specially for the Royal Parks project:

$$A = h N / t$$

A = the estimated total Arrivals
 h = the effective hours open
 N = the average Number counted and
 t = the average time spent (time in park)

The Steady State count comprises a series of sample poll counts on weekday and weekend days to find the average number of people in a given park. Every person in the park is counted once in each segment by a researcher following a pre-arranged route that provides maximum visibility. Each counter begins counting people in their respective segments at a precise moment in time, meeting at the end of each count to log the data. Five counts are undertaken and the results are recorded on a data sheet and then added together and divided by the number of counts to obtain an average. Counts were only abandoned in extremely adverse weather conditions and only on one occasion did this happen.

In order to ascertain the average time spent in each parks (t) numerous short interviews were conducted in different locations and observations about conditions were noted. To increase the accuracy of the average time different categories of people passing through the park – e.g. walkers, cyclists, joggers, skate boarders, etc – were interviewed. For the same reasons people pursuing different activities (e.g. sports, bird watching etc) were interviewed, which is an important consideration for the outer parks where people pursuing different activities spend varying lengths of time in the parks.

The interviews were also conducted in different seasons to ascertain the average lengths of time spent by visitors in the parks in two seasons: summer (April to September) and winter (October to March). An effective opening time in park was used for each season as opposed to the published opening hours because of the use of privately owned and informal entrances and exits. The existence of exits and entrances that did not appear to be under the management of the Royal Parks Agency was also a consideration in this respect.

As was the case with the study of the central parks, the counters also collected data on weather conditions, including temperature, and make notes about any factors that might have an influence on the data. This additional data was recorded alongside the records of the Steady State Count totals and thus there is a field record of the conditions in which the counts were conducted. The researchers also recorded practical and social insights that might have some bearing on the data.

As was the case with the first study, the counts in the outer parks were designed not to clash with major events in the parks and thus the figures are conservative and under-represent the overall total. It was, however, not possible to exclude all events since large numbers of small informal events in the parks that are often arranged by visitors, possibly not in consultation with the Royal Parks Agency. Accordingly, these visitors were included in the counts, as were participants in smaller events that appear to have been arranged with the parks but did not appear with accessible advance publicity.

As with any research method there are advantages and disadvantages regarding the Steady State Count and these were listed in the report of the first study.

4. THE FINDINGS

Monthly Figures

Unlike the central London parks, the data collected in the five outer parks was very mixed with one park showing a significant increase in visitor numbers since the 1990s and others showing a modest decline. For the reasons given in the following analytical section the results are not surprising and are due to a variety of factors such as: the inclement weather of 2008, an early Easter Bank Holiday, and problems with transport. An important point to note is that the annual figure does not necessarily match precisely the total of monthly figures since they have been copied from a spreadsheet in which the figures have been calculated to four decimal points that would be meaningless to represent in this report. The decimal points have been left out for reasons of clarity. Strictly speaking, for example, the total number of visitors to according to the calculations to Primrose Hill between 2007 and 2008 is 925,580.6235 and not 925,580.

Table 3 Visitor Figures (Steady State Count August 2007- July 2008)

Bushy Park	Visitor Numbers
August 2007	180,513
September 2007	169,584
October 2007	80,075
November 2007	65,563
December 2007	58,307
January 2008	51,444
February 2008	73,425
March 2008	96,683
April 2008	116,644
May 2008	162,718
June 2008	160,533
July 2008	100,079
Annual Total	1,315,573

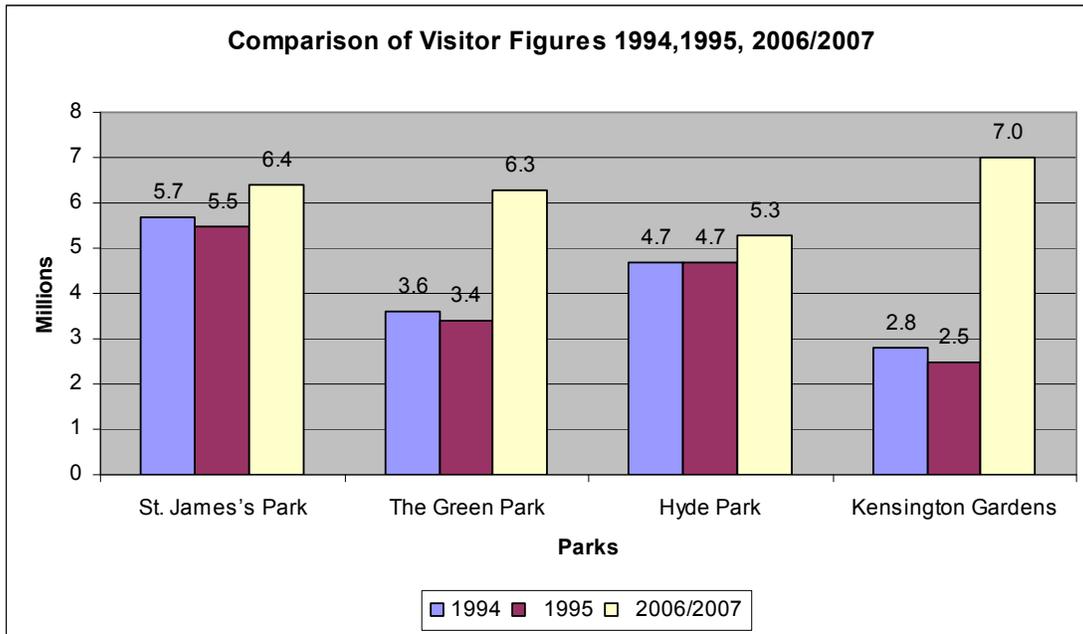
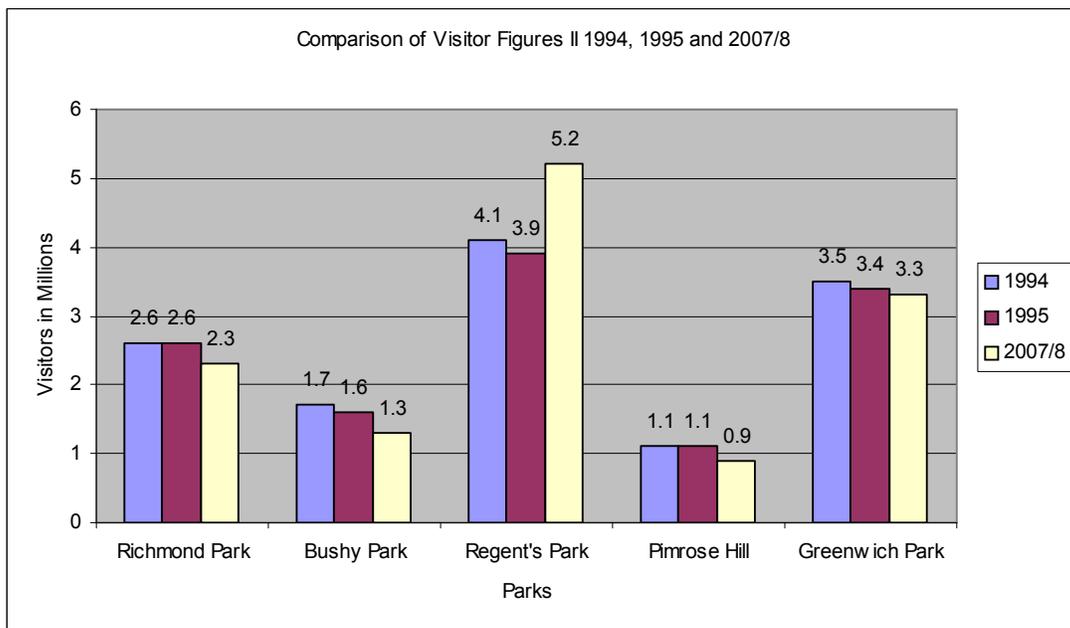
Greenwich Park	Visitor Numbers
August 2007	560,515
September 2007	376,964
October 2007	156,281
November 2007	123,578
December 2007	71,483
January 2008	103,293
February 2008	264,311
March 2008	93,159
April 2008	243,127
May 2008	316,247
June 2008	430,191
July 2008	588,720
Annual Total	3,327,876

Primrose Hill	Visitor Numbers
August 2007	199,180
September 2007	96,020
October 2007	55,667
November 2007	33,953
December 2007	27,383
January 2008	54,575
February 2008	102,194
March 2008	55,919
April 2008	54,295
May 2008	69,419
June 2008	78,345
July 2008	125,624
Annual Total	952,580

The Regent's Park	Visitor Numbers
August 2007	809,039*
September 2007	415,178
October 2007	321,370
November 2007	174,253
December 2007	142,438
January 2008	301,476
February 2008	418,660
March 2008	335,874
April 2008	416,633
May 2008	464,036
June 2008	505,052
July 2008	882,747
Annual Total	5,186,761

*The days studied were somewhat atypical because they were bank holidays

Richmond Park	Visitor Numbers
August 2007	128,146
September 2007	217,015
October 2007	151,800
November 2007	189,406
December 2007	65,195
January 2008	156,946
February 2008	214,777
March 2008	227,213
April 2008	119,830
May 2008	358,217
June 2008	127,723
July 2008	319,097
Annual Total	2,275,373

Table 4 Comparison of Visitor Figures 1994, 1995 and 2006-2007**Table 5 Comparison of Visitor Figures II 1994, 1995 and 2006-2007**

5. ANALYSIS OF FINDINGS

The outer parks differ from each other more a great deal and thus the following analysis of findings contains general observations that apply to all the parks studied between 2007 and 2008 and park specific observations.

Impact of Tourism

The Royal Parks are featured on the official web site of *Visit London*, and in the first report the impact of tourism on the four central parks was noted. Although the origins of visitors did not lie within the remit of that study, the following was noted:

“Very large numbers of overseas visitors were seen by the research team in parks such as Green Park and St James’s Park throughout the year and this was supported by the ‘time in park’ interviews in which those questioned often supplied their countries of origin without being asked.”

The notes taken throughout the second study do not draw as much attention to the importance of tourism in Bushy Park, Primrose Hill, and Richmond Park, though reference is made of them in relation to Greenwich Park and The Regent’s Park. As was the case with the central parks, visitors often supplied their countries of origin without being asked when interviewed about the time spent in the park.

There has also been a slight reduction in the overall number of visitors to Britain with *National Statistics* reporting on 11 August 2008 a decline of 2 per cent, albeit not seasonally adjusted, during the 12 months up to May 2008 as compared with the same period in the previous year (www.statistics.gov.uk). Tourists are moreover more likely to use public transport than private transport and thus they are less likely to visit the less accessible parks (Bushy Park, Primrose Hill and Richmond Park) than UK residents with access to their own vehicles. The decline in tourist numbers may have had a modest impact on visitor numbers to the outer parks, but the notes taken by the interviewers seem to indicate that tourists are not as significant in Richmond Park, Primrose Hill and Bushy Park, as in The Regent’s Park and Greenwich Park. While tourists are clearly important in The Regents’ Park and Greenwich Park, they do not appear to be arriving in as large numbers as in Hyde Park, Kensington Gardens, Green Park and St James’s Park.

Having decided to visit a destination tourists seem also seem to be less deterred by the weather than local residents who have the option of visiting on another occasion. For example, the research notes indicate that parts of Greenwich Park favoured by locals such as the Flower Garden could be virtually deserted in inclement weather. In contrast tourists continued to frequent, albeit in reduced numbers, the access routes to the Observatory and to use the viewpoint over London in front of General Wolfe’s statue regardless of the weather.

Wet Weather in 2008

The four central parks were studied during one of the warmest winter and spring periods of recent history. The Met Office, for example, described temperatures in January, February and March 2007 as being between 1.5° C and 3° C above average with April being an exceptionally warm month with average temperatures of 5° C above the 1961-1990 average. According to the Central England Temperature Record (CET), which dates back to 1659

and is the world's oldest continual weather dataset, this winter was the second warmest since 1989. The Met Office's records go back to 1914 and they show that the South of England experienced the warmest winter on record with a mean temperature of 6.53° C.

There was a marked contrast between 2006-2007 and 2007-2008 study periods since temperatures were generally cooler throughout the second year. The Met Office's summary of monthly weather shows that the mean temperature was generally close to the average towards the end of summer, though England experienced its coolest August since 1993. The weather for September, October, November and December remained close to the average, but by January the weather had become more unusual; it was the 4th warmest January in Southern England with rainfall generally above average. February was a comparatively warm month with mean temperatures between 1.4 and 3°C above normal for the UK. Temperatures in March were slightly above average, but the month is provisionally described as the wettest in England since 1981. In April mean temperatures were described as close to the average across the UK, but generally rainfall was above average, but the month also saw some exceptionally inclement weather. On 6th April snow and sleet moved in across much of Southeast England with 5-10cm of snow recorded in many places and Heathrow Airport was forced to close for a period. The inclement weather continued into May with above average rainfall. The month of June was the coolest since 2001, though there were warm days with a maximum temperature of 26.9°C being recorded in St James's Park on 9th June 2008. In July temperatures were close to the average, but rainfall was generally well above average across England (www.metoffice.gov.uk)

The weather data provided by the Met Office provides a useful context for the study, but the notes written by the researchers provide a closer insight into what was being experienced by visitors in the parks. It is a picture of volatility with a combination of pleasant and sunny conditions and wet and stormy days. The temperatures recorded on portable thermometers often appeared quite reasonable for the time of year and yet the notes often refer to strong and cold winds and chilly conditions. For example, in the notes for 13th April the conditions in The Regent's Park at 4.30 in the afternoon are described as "rain/hailstones – very cold – inclement", though the temperature was a reasonable 10°C. Cold north-easterly winds are referred to a few days later on 18th April in Greenwich Park between 2.05pm and 4.40pm, though again the recorded temperature remained 10°C. The notes sometimes show that a deterioration in weather conditions was often accompanied by a decline in the numbers of visitors in the park, though the precise link between weather conditions and visitation lay beyond the bounds of this study. Only continuous counts can accurately establish the exact numbers affected.

As was reported in the previous study visitors often use existing weather conditions to judge whether or not a visit to a park would be worthwhile. The volatile weather of 2008 could well have made potential visitors less confident about making a visit, the opposite of what seemed to be happening in the winter and spring of 2007. The combination of the Met Office's weather summaries and first hand observations by researchers in the parks helps to provide insights into the dynamics of visitor numbers, but this needs to be supported by studies of visitors' perceptions and preferences with regard to weather conditions.

Perceptions of Spring and Easter

As was noted in the previous report it is possible that cultural factors, such as the positive way that springtime and especially Easter are viewed may be significant. In view of the popularity of taking summer holidays abroad, it is also possible that spring has become the season in which leisure activities are pursued close to home. London is also increasingly becoming a popular Easter holiday destination that attracts both domestic and overseas visitors. In 2007 Easter fell on the weekend of 6th-9th April and was accompanied by exceptionally good weather with temperatures ranging between 19°C and 20°C in Hyde Park and Kensington Gardens on Easter Sunday according to the notes kept by the researchers. Good Friday in 2007 was a little cooler to start with, but temperatures eventually rose to 20°C by 1.00pm in Bushy Park, and were sufficiently good to attract large numbers of visitors. By 2.00pm the police were forced to close the main car park because of overcrowding.

There was a sharp contrast with 2008 when Easter fell exceptionally earlier (21st March-24th March). For example, the research notes for the 19th March in The Regent's Park record the weather as inclement with a cold wind constantly blowing between 1.00pm and 4pm with a temperature of 10 °C. Conditions were even worse the following day (20th March) in Greenwich Park where wind and rain never let up all afternoon, though the temperature remained at 10°C, eventually giving way to sleet at 3.40pm. The combination of poor weather forecasts and the actual experience of inclement weather that occurred shortly before and during the Easter weekend doubtless had a negative impact whether or not people decided to visit the Royal Parks. These conditions may also have had an impact on domestic tourism from outside London, and Visit Britain expressed its concern about the propensity to travel in relation an exceptionally early Easter and poor weather conditions (www.tourismtrade.org.uk)

Transport and Parking

It would appear that the distinction between inner parks and outer parks in this report is a bit inconsistent considering that The Regent's Park is close to central London. But when London's transport links and travel zones are factored in the distinction becomes a little clearer. The so-called four central parks – Hyde Park, Kensington Gardens, The Green Park and St James's Park – all lie within Zone 1 and are well served by underground and bus links. While the southern half of Regent's Park is served by two Zone 1 underground stations, neither of which adjoins the park, the northern half lies in Zone 2 and has, along with Primrose Hill, no underground connections. The bus services for The Regent's Park and Primrose Hill are good, but do not completely match those of the central parks. Greenwich Park lies in Zone 2 and, though there are two underground connections in the area, they are not close to the park.

When comparing The Regent's Park, Primrose Hill and Greenwich Park to the central parks access to good public transport matters a great deal. Since the University of North London (now London Metropolitan University) conducted the visitor counts in the 1990s, there have been major changes in London's transport policy and practice that appear to have had a greater impact on the outer parks than the inner ones for the following reasons:

- There was the introduction of the London Congestion Charge on 17th February 2003 and its extension westwards on 19th February 2007, which seems to have had a

more adverse impact on the Regent's Park than the central London parks. The southern border of Regent's Park lies close to the border of the congestion charge zone and because it is not quite as well served with public transport it has become slightly more inaccessible via central London.

- The imposition of tighter parking restrictions in Zones 1 and 2 since the 1990s, also appears to have had a more marked impact on The Regent's Park Primrose Hill and Greenwich Park than on the central parks because of the slightly lower availability public transport and this may have restrained the growth in visitor numbers.
- The increasing availability of various kinds of free travel for children may have encouraged families using the parks to switch to public transport, thereby favouring the parks with better connections. Transport for London allows children under 5 to travel for free accompanied by an adult on the tube, Overground Rail, DLR (Docklands light railway), trams and busses. Children between 5 and 10 can travel free without being accompanied by an adult on trams and busses, but must be accompanied by an adult when travelling for free on the tube, Overground Rail and DLR. 11 to 15 year olds can travel for free on buses and trams without being accompanied and there are various discounts in place for older children.
- *Visit London* advertises the fact that 'kids go free' as a reason for visiting London and this undoubtedly has some impact on the travel decisions taken by visitors to London.
- Throughout much of 2008 access to Greenwich Park at the weekends was severely hindered by the closure of sections of the DLR and the Jubilee Line for maintenance work and this may have held down the overall visitor numbers for that year. The partial closure of the Jubilee Line is critical since the extension of this line in 1998 brought greater possibilities for more visitors.
- Richmond Park and Bushy Park have also remained relatively inaccessible since both parks are some distance from public transport, the overground and underground in the case of Richmond Park and the overground in the case of Bushy Park.

Comparisons with 1994-1995

The data collected in 2007-2008 shows either a significant increase or modest decline with the data collected in the mid 1990s. Any comparison should, however, be treated with caution since the 1994-1995 period was exceptional. For example, The Global Atmosphere Division of the Department of the Environment (now the Department of the Environment, Transport and the Regions) commissioned the University of East Anglia to investigate the economic implications of the hot and dry summer of 1995 and the generally warm conditions that prevailed from November 1994 to October 1995, leading to a report entitled *Economic Impacts of the Hot Summer and Unusually Warm Year of 1995*. Given the poor weather conditions of 2007-2008, the parks proved to be remarkably resilient, even in especially weather sensitive parks such as Bushy Park, Primrose Hill and The Regent's Park. The question of 'weather sensitivity' is explored in the following analyses of individual parks.

Bushy Park

The modest decline in the number of visitors to Bushy Park since the mid 1990s is not surprising when the inclement weather on 2007-2008 is taken into account. Bushy Park receives relatively few tourists and its local clientele and day-trippers, using their own

vehicles from a wider geographical area, are able to postpone a visit in adverse weather conditions knowing that there will be other opportunities to visit the park, an option not open to tourists with a fixed timetable. Given that many visitors arrive with their own transport, it is not unusual to see vehicles turning up with the occupants assessing the situation in the park and moving on if the weather appears to be unsatisfactory. It is suggested that visitors who arrive in private transport simply have more immediate options open to them than those arriving on public transport. Bushy Park also has fewer associated attractions, notwithstanding the proximity of Hampton Court, than the parks of central London. It is thus more weather dependent.

Greenwich Park

Despite the adverse weather conditions of 2007-2008 and the problems of access by public transport due to the DLR and Jubilee Line temporary closures, the figures were comparable (i.e. a very modest decline) with the number of visitors in the mid 1990s. Greenwich has a well-publicised attraction, The Royal Observatory, that is popular with tourists and even when inclement weather deterred local visitors, tourists could be seen in large numbers on the access routes to the Observatory. The notes taken by the researchers reveal that the park could fill rapidly with any improvement in the weather, but the overall conclusion is that this park is less 'weather sensitive' than Bushy Park, Primrose Hill and Richmond Park.

Primrose Hill

The visitor numbers for 2007-2008 were slightly down as compared with the mid 1990s, whereas The Regent's Park experienced a significant increase. Primrose Hill is considered to be an extension of The Regent's Park and this is how it is portrayed on official maps, but it differs from its larger neighbour in significant ways. Despite its apparent proximity to the larger park, Primrose Hill is not readily accessible from The Regent's Park, and a journey between the two involves walking across a canal bridge and crossing two fairly busy roads, one of which is the Outer Circle of The Regent's Park. The park is served by buses but has no underground connections, and is surrounded by streets with stiff parking restrictions. Other than the park itself, there are no obvious other attractions. The park appears to receive relatively few tourists as compared with its larger neighbour and can reasonably be described as a 'weather sensitive' park, not least because many visitors climb the hill to experience panoramic views of London and are presumably deterred by poor visibility in poor weather. The research notes reveal that the park could empty rapidly in inclement weather, rapidly filling up again when conditions improved, suggestive of a largely local visitor base. This is supported by the experience of conducting interviews in which large numbers of respondents who volunteered the information that they lived locally without being asked and took a passionate interest in why they were being asked in the first place.

The Regent's Park

Given that this park hosts numerous special events, which were largely avoided by the researchers, the visitor count figures obtained during this study do not represent the complete picture. The fact that the number of visitors recorded in a year with poor weather is significantly higher than those in the relatively good mid 1990s suggests that the underlying trend, excluding special events, is upwards. The researchers who interviewed visitors about the time spent in park were struck by the highly enthusiastic and appreciative

comments volunteered by both UK residents and overseas visitors, even though they were not asked for their opinions. The interviews also revealed that large numbers of visitors use the park as a thoroughfare of choice to travel between different parts of London and as a route to be enjoyed on the way to London Zoo. The fact that the park is used as a thoroughfare does not diminish its importance as an attraction in its own right. In general, the response from people interviewed in all parks was overwhelmingly positive, but The Regent's Park seemed to elicit a particularly supportive reaction from people using the park as a route to somewhere else. One noteworthy group who appeared in the time in park surveys were London taxi drivers taking a break. They readily identified themselves as 'cabbies', pointing out that they were regular and highly supportive users of the park.

Richmond Park

The data collected in 2007-2008 represents a modest decline in visitors since the mid 1990s, but this observation needs to be treated with caution. Because of its large scale, highly varied topography and exposure to the elements Richmond Park proved to be an especially difficult park in which to conduct research. With 1,000 hectares (2,500 acres) the park is more than double the size of the next largest park, Bushy Park. Park users also access the park by a wide variety of means (e.g. on foot, by car, by cycle, by motorcycle, on horseback, in small minibuses) and this presents a challenge for any counting methodology whether manual or automated. For example, the manpower required to conduct a manual exit survey of the kind conducted in the mid 1990s, given an estimated 17km of boundaries would be financially challenging by 21st century standards.

The Steady State Count used with reasonable efficiency in all the other parks was tested to its limits in Richmond Park not least because the exceptionally wet weather of 2008 severely hampered visibility in the vast spaces of Richmond Park. The Steady State Count relies on the ability to actually see people and in a very exposed space such as Richmond Park this can easily lead to an undercount in weather that hinders visibility. In none of the other parks, despite the often-inclement weather, were there problems due to lack of visibility.

The figures also do not reflect a particular characteristic of Richmond Park, namely the use of the park by motorists who do not alight from their vehicles, a tendency exacerbated by bad weather. Many of these visitors may simply pass through the park without stopping, apparently not using the park as a thoroughfare but as a leisure experience. Others, however, stop and enjoy the park without getting out of their cars, sometimes picnicking in them. It is moreover very difficult to conduct research on visitors who do not alight from their vehicles, a particular feature of Richmond Park. These comments are thus based on the observations of our research team and not on direct contact with motorists. One issue that may also have had an impact on the behaviour of drivers in 2008 was the unexpected and occasional closure of sections of the roads through the park. This seems, however, to have been a workday phenomenon while resurfacing took place, with the roads opening at the weekends.

Moreover, comparisons with the mid 1990s are not very satisfactory with regard to Richmond Park because of the budgetary constraints of 2007 and 2008. The budget for the counts of 1994 and 1995 were sufficient to study vehicle departures and occupancy numbers and these results were factored into the overall figures for the mid 1990s. There

was insufficient funding to cover this research and it is recommended a vehicle and vehicle occupancy studies should be undertaken to estimate the overall figure numbers. Such a study would also need to take into account the fact that Pembroke Lodge with its visitor facilities is less weather sensitive than the rest of the park and that data collected there not representative of the whole park. Such research could indicate that instead of a modest decline in visitor arrivals since the mid 1990s, there could have been an increase.

6. BOUNDARY SURVEY

In order to better understand the complexities of the park in relation to the possible introduction of automated count sensors, a survey of all the parks' boundaries was undertaken and an inventory of all entrances is included in the Appendix. The general observation is that the boundaries of all the parks are highly complex with wide variation between the different parks and thus the issues are tackled here on a case-by-case basis.

St James's Park

Of the thirteen formal entrances marked on the official map only two have gates and thus the park may be considered to be almost entirely open access. Most visitors enter the park via the marked entrances, but the low railings that surround much of the park do not present much of a barrier and there are numerous informal entrances. There is not much of a pattern to these informal entrances and at busy periods, such as the Changing of the Guards, visitors can be seen crossing these barriers in waves. Footfall data obtained from the formal entrances is thus likely to represent a marked undercount. The lack of furniture on the perimeters makes it also difficult to install sensors without the introduction of purpose built gantries that would not only be expensive but would also doubtless be regarded as an eyesore. An interim solution to ascertaining visitor numbers might involve a steady state count combined with footfall data to help calculate the percentage difference between visitors arriving by formal and informal entrances. The percentage could then be added to footfall data in future counts to provide a more accurate picture of the visitor numbers involved.

The Green Park

A closely barred wrought iron fence provides an effective barrier between the park and Piccadilly running from the Memorial Gates to the north entrance to Queen's Walk. The fence is breached by five formal entrances with lockable gates, one set of which, Devonshire Gates, appears to be permanently shut. The park can, however, be accessed via a tunnel leading from the underground, the entrance to which appears to be managed by the underground station. Queen's Walk can be sealed off with lockable traffic gates at either end, but the waist high railing running between Queen's Walk and the park does not provide much of an effective barrier. The waist high railing that runs between Memorial Gates and Canada Gate also does not provide much of a barrier and, though the majority of visitors use the formal entrances along this perimeter, there are numerous informal entrances. As is the case with St James's Park the informal entrances that do not appear to have much of a pattern and visitors can be seen breaching these perimeters in waves during busy periods. There is also open access at Memorial Gates and to the west of Canada Gate and, though there is a stone wall between the gate and the opening, it is relatively easy to

climb. During busy periods visitors can be seen either standing on or crossing over this wall. The curved wall behind the flowerbed leading to South and West Africa Gate provides a more effective barrier.

There is more furniture on the perimeter of The Green Park than St James's Park and it would thus be feasible to install sensors by the entrances from Piccadilly, and the open access points beside Memorial Gates, Canada Gate and South and West Africa Gate. However, the waist high railings that border Constitution Hill and Queen's Walk would remain problematic. An interim solution to calculating visitor numbers might involve a steady state count combined with data from sensors to help calculate the percentage difference between visitors arriving via the different perimeters. The percentage could then be added to sensor data in future counts to provide a more complete picture of the visitor numbers involved. Such a solution would probably have to involve more counts to have to take into account the more varied dynamics of the borders of The Green Park in comparison with those of St James's.

Hyde Park

The park is sealed on its northern, eastern and southern sides by reasonably effective barriers. Wrought iron railings largely protect the northern and eastern perimeters, whereas the southern side has a mixture of railings and walls. The situation is, however, complicated by the presence of gates on the southern side that are not under the management of the Royal Parks Agency, but under other organisations such as the army (e.g. Hyde Park Barracks). The situation is made more complex by the fact that much of the western side of the park has open access making it difficult to either undertake manual exit surveys or install sensors. There is sufficient furniture around many entrances to mount sensors, but not in every case, and thus some hybrid counting scheme involving a manual steady state count and a sensor perimeter count might have to be undertaken to calculate the percentage of visitors using entrances not covered by sensors. Alternatively, research should be invested in developing a sensor based count that provides a snapshot of visitors within the park at a given moment and does not involve counting visitors crossing the perimeter.

Kensington Gardens

This is one of the Royal Parks that has a reasonably well-defined boundary. The exits tend to be either wrought iron pedestrian gates or wrought iron double traffic gates. The boundary is surrounded by wrought iron railings, often of the arrowhead type, and there do not appear to be any informal exits and entrances. With the exception of Kensington Palace, whose public entrances open on to the park, there appear to be no gates that are not under the management of the Royal Parks Agency. There is a reasonable amount of park furniture on which to install sensors, though power sources remain problematic. Visitor numbers could be ascertained accurately with a manual exit survey, though this would be labour intensive and therefore expensive because of the large number (i.e. 26) of exits and the distances involved.

The Regent's Park

Due to the exceptionally complex layout of this park, more space has had to be devoted to The Regent's Park in this report. Despite the fact that the entrances to the Regent's Park

largely comprise traditional wrought iron pedestrian and traffic gates, the boundaries of the park are highly complex for the following reasons:

- There are large numbers of gates (i.e. 40) that could be counted as exits and entrances.
- Two gates the lead out northwards on to the Outer Circle appear to be permanently locked.
- There are gates that are accessible to the public, but appear to be used only for servicing business premises (e.g. The Garden Café) and other facilities (e.g. Open Air Theatre).
- There are gates that lead on to private properties (e.g. St John's Lodge, Winfield House).
- The precise borders between Regent's College and The Regent's Park are unclear and this is further compounded by the presence of a sign belonging to the college within the borders of the area managed by the Royal Parks Agency.
- The Outer Circle runs inside the park's boundaries for approximately a third of its length and is fed by one road that passes completely inside the parks and two other roads that border the park on one side respectively. Another short road that lies entirely within the park (e.g. Gloucester Slips) has two junctions with the Outer Circle.
- The Inner Circle is a public road lying completely within the park and yet lockable gates provide access to the green areas suggesting that the road is not part of the park. This makes it difficult to tell when a visitor is inside or outside the park. There are similar issues with regard to the two roads, which have borders with the park on both sides respectively, that link the Inner Circle to the city's road system.
- The Regent's Canal, which is part of the Grand Union Canal, passes through northwestern area of the park for just under 2km, but is not completely under the management of the Royal Parks Agency. The canal, which was opened in 1820, came under the auspices of the British Waterways Board in 1963. The formation of the London Waterways partnership, which includes Regent's Canal, was inaugurated in 1996 by British Waterways (www.canalmuseum.org.uk) to foster the regeneration of the canal and surrounding area. Camden Council also includes the canal in its Regent's Canal Area Appraisal and Management Strategy (www.camden.gov.uk) covering the period 18 February 2008 to 9 June 2008. The canal is an important visitor attraction and many visitors can be seen accessing the park from the canal and its towpaths. However, it remains unclear whether or not the visitors using the waterway and the towpaths count as visitors to the park.

For the above reasons any visitor counting system either manually (e.g. exit survey) or automatically (i.e. using sensors) that relies on the notion of visitors crossing a perimeter boundaries is likely to be problematic in The Regent's Park. For the time being the 'Steady State' count remains the most effective way of monitoring the parks until automated sensors replace its functions.

Primrose Hill

In contrast to The Regent's Park and despite the existence of some private gates and a gate that appears to be under local authority management (i.e. Camden Council), Primrose Hill has a relatively well-defined boundary. A counting system that was either manual (e.g. exit survey) or automated (e.g. using sensors) that relied on the notion of visitors crossing a clearly defined perimeter could work in Primrose Hill. However, the lack of park furniture

near many of the exits and entrances would raise the cost of installing sensors because gantries would have to be erected. Manual surveys could also prove cost effective because of the small size of the park and the limited number of exits and entrances (i.e. 11).

Greenwich Park

Greenwich Park has some of the most varied exits and entrances of any of the Royal Parks comprising the following: gates set into brick walls, gates attached to brick pillars, gates attached to high wrought iron fences and gates attached to low iron fences. Despite this variety Greenwich Park has a coherent boundary even though two gates leading to the National Maritime Museum appear to be under the management of the museum and not the Royal Parks Agency. Counting systems, both manual and automated, that rely on visitors crossing a clear perimeter can also be undertaken in this park. Greenwich Park (74 hectares/183 acres) is moreover much smaller than parks such as Kensington Gardens (100 hectares/275 acres), Hyde Park (142 hectares/350 acres) and The Regent's Park (166 hectares/410 acres) and because there are relatively few (i.e. 14) exits and entrances exit surveys would be reasonably cost effective. Furthermore, the existence of brick walls and high fences provides opportunities for mounting sensors, though the number of power sources is limited.

Richmond Park

With 1000 hectares (2500 acres) Richmond Park comprises the largest of the Royal Parks and because of its vast scale it presents a serious challenge for any counting method either manual or automated. The entrances and exits are very varied ranging from traditional wrought iron gates between brick columns to more modern gates made from tubular steel. The boundary is coherent and there are only 19 gates, but despite these advantages a manual exit survey would not be very cost effective because of the distances involved and the time taken to travel between gates. A steady state count is more cost effective because it can be done more quickly, but proves to be less reliable in Richmond Park than other parks when visibility becomes an issue in poor weather. A move towards using automated counts is clearly a priority in this park whether based on counting visitors crossing a perimeter or assessing numbers actually in the park at given moments. A perimeter system could, moreover, work well since the boundaries are coherent and there is quite a bit of park furniture in place (e.g. brick columns, lodge house walls) that could be used to mount sensors. The survey also turned up a much higher proportion (9 out of 19) of possible power sources close to exits and entrances as compared with the other parks. Any automated sensors used on the perimeter would have to be calibrated to take into account that very wide variety of forms of transport used by visitors to the park (e.g. cars, motorcycles, buses, horses, bicycles), but this would not be especially problematic.

Bushy Park

With 445 hectares (1099 acres), Bushy Park is the second largest Royal Park after Richmond. As is the case with Richmond Park, Bushy Park's vast scale it presents a serious challenge for any counting method either manual or automated. It has 25 sets of gates with a new one proposed leading to the Sport Ground, but 7 sets of gates have no external access. The majority of gates are made of traditional wrought iron, often set in brick walls, and it is these gates that tend to provide public access. There is sufficient street furniture, though

often without power, at most public access points to mount sensors. The perimeter appears to be completely sealed with a range of types of barrier: brick walls, steel cable fences and iron railings. A perimeter system would work well in this park, but automated sensors would have to be calibrated to take into account that very wide variety of forms of transport used by visitors to the park (e.g. cars, motorcycles, buses, horses, bicycles).

7. AUTOMATED COUNTING

As part of the study many companies involved in work on sensors and instrumentation were contacted by phone and email by the team at London Metropolitan University. The common response was that without a clearly defined commercial opportunity, these companies were unwilling to engage in any discussions. The situation changed radically when the university began to work with *Sensors and Instrumentation Knowledge Transfer Network* and the researchers from London Metropolitan University were eventually able to talk to seven leading companies working in this area, as well as two other universities. The companies wish to remain anonymous until such time as a partnership with the Royal Parks can be established, but were willing to let their views be aired. There was also considerable agreement among them about how the Royal Parks' needs could be satisfied and what is reported here represents a summary of that consensus:

- The sensor systems used indoors in supermarkets and museums are relatively inexpensive, but are not sufficiently robust to be deployed outdoors.
- There are sensors that can be deployed outdoors without the need for power sources but they are typically used by airports and the military, but are expensive, costing hundreds of thousands of pounds to build a system.
- Sensors can detect when a perimeter is breached and can be set up to recognise what caused the breach (e.g. animal footfall, human footfall, passage of car or truck). For example, a fibre optic cable could be buried in a trench surrounding a given park, which would not be detectable to the human eye and thus be neither an eyesore nor vulnerable to vandalism.
- Sensors can be used to detect the number of people in a given space at a given time, though how this could be adapted to the needs of a steady state count remains unknown. Sensors used for this purpose are typically either attached to an aeroplane whose flight is partially sponsored for this purpose or are mounted on a satellite.
- Sensors can do much more than simply count people and the general opinion was that if the Royal Parks Agency would like to install them then more consideration would need to be given about how they could be used as a management tool, especially with regard to environmental sustainability.
- To design a custom-made system of sensors for the Royal Parks alone would be prohibitively expensive, but since there are likely to be many other national government, local government and private agencies that have similar needs then it would make sense to design something for the sector as a whole and thereby bring down costs through economies of scale.
- Finally, the general conclusion was that a consortium of parks, other open air attractions, universities and the makers of sensors and instrumentation should be formed to secure research funding for a research project to drive forward development in the parks and outdoor attractions management area. The first step would be to canvas the various government bodies that provide funding for this kind of research.

8. CONCLUSIONS AND RECOMMENDATIONS

The study conducted by London Metropolitan University on behalf of The Royal Parks Agency between August 2007 and July 2008 with the aimed of providing valid and reliable visitor numbers. During the second year the boundaries of all the Royal Parks were surveyed in order to assess the feasibility of on installing a perimeter system of counting visitors using sensors. Advice was sought from industrial and university sources via the *Sensors and Instrumentation Knowledge Transfer Network* on the installation of automated counters to provide a cost effective and sustainable solution for monitoring visitor arrivals.

The second study showed that there had not overall been a highly significant increase in the number of visitors to the outer parks in contrast to the central London parks since the university began collecting data on visitor arrivals in the mid 1990s. The overall picture, however, masks considerable variety among these parks with The Regent's Park showing a considerable increase, whereas Primrose Hill, Greenwich, Richmond and Bushy experienced a decline. Comparisons should, however, be treated cautiously since the 1994-1995 period when the previous visitor counts were undertaken was exceptional. The summer of 1995 was exceptionally hot and dry summer of 1995 and the generally warm conditions prevailed from November 1994 to October 1995. Any comparisons with the study of 2006-2007 should also be treated with care since that year experienced one of the warmest winter and spring periods of recent history with Easter falling late and enjoying exceptionally warm weather.

The weather during the second half of the study (2007-2008) turned out to be equally exceptional with conditions becoming turbulent after January. The rainfall was generally above average and the fact that the sky was repeatedly gloomy and overcast doubtless influenced visitors' perceptions on the desirability of making a park visit. In particular March has been is provisionally described as the wettest in England since 1981, and this was the month in which Easter fell. The following month also suffered from some exceptionally inclement weather with snow and sleet moving in across much of Southeast England on 6th April, forcing the temporary closure of Heathrow Airport. The rainfall remained above average until the end of the study in July. The exceptional weather clearly had an impact on all these five parks, but the fact that one of them The Regent's Park, experienced an increase is noteworthy.

Other factors such as changes in transport policy probably held back increases in visitation, though a rise in the number of tourists since the mid 1990s helped to mitigate these impacts. Tourism is clearly important in Greenwich Park and The Regent's Park, but is far less the case in Primrose Hill, Richmond Park and Bushy Park, three parks that this study characterises as being 'weather sensitive'. Not only are Richmond Park, Bushy Park, and Primrose Hill less accessible, especially for tourists, by public transport than the two other parks included in this study, but they also have fewer attractions and events than the other big parks like The Regent's Park, Kensington Gardens and Hyde Park. Despite being weather sensitive and comparatively inaccessible, as well as less well served with attractions the number of visitors to Primrose Hill, Richmond Park and Bushy Park still remained high despite the exceptionally poor weather of 2008.

The second study made use of a Steady State count using a customised formula that was devised in January 2007 to calculate the number of visitors to the central London parks. The manual Steady State count is more cost effective, especially in the larger parks like Hyde Park, than a manual exit survey, and is more likely to provide a more accurate view of visitor numbers in parks that have partial open access and many informal exits and entrances. Manual counts can be used to provide reliable statistics and can be used to calibrate automated counts, but they do not provide the constant kind of constant monitoring that is useful for managing these open spaces. However, the start up costs for introducing automated counts is prohibitively expensive, especially if the system has to be customised. If, however, a system could be devised that could be used by a large number of outdoor attractions the economies of scale would help reduce costs. The existing technologies and systems used in indoor attractions such as museums are also not easily transferable to outdoor attractions, and the consensus from the sensors and instrumentation industry is that a consortium of industry providers, universities and outdoor attractions should be formed to bid for grants to provide funding for experimentation to find a cost effective long-term solution to monitoring visitor numbers in the Royal Parks.

APPENDIX

ST JAMES'S PARK		
Gate	Description	Power and Mounts
Horse Guard's Road	Wrought iron fence gives way to open access between Clive Statue and Guard's Memorial	No
Guard's Memorial	Wrought iron double traffic gate with lock	No
Guard's Memorial – The Mall	Open access	No
Artillery Memorial	Open access between two low railings	
Marlborough Gate	Wrought iron double traffic gate with lock	Light source in pavement
The Mall – Stable Yard Road	Open access between two low railings	No
The Mall – opposite South & West Africa Gate	Open access between two low railings leading to stone wall behind Memorial Gardens	No
Australia Gate	Unclear in relation to park	Yes
Birdcage Walk - west	Open access between two low railings	No
Birdcage Walk – west centre	Open access between two low railings	No
Birdcage Walk – centre	Birdcage Walk – west centre	No
Birdcage Walk – east centre	Birdcage Walk – west centre	No
Birdcage Walk – east (Storey's Gate)	Birdcage Walk – west centre	No

GREEN PARK		
Gate	Description	Power and Mounts
Queen's Walk /The Mall	Traffic gate with lock	No
Queen's Walk South	Open access – gap in waist high railings	No
Queen's Walk – opposite Stornaway House	Open access – gap in waist high railings	No
Queen's Walk North	Open access – gap in waist high railings	No
Queen's Walk - Piccadilly	Traffic gate with lock	No
Green Park tube	Open access, but gate closed by underground outside tube opening hours	Possible
Piccadilly – east of Broad Walk	Traffic gate with lock	No

GREEN PARK		
Gate	Description	Power and Mounts
Devonshire Gate	18th century (1730) decorative double wrought iron gate flanked by stone pillars – permanently locked	No
Piccadilly – west of Broad Walk	Traffic gate with lock	No
Piccadilly – opposite Brick Street	Wrought iron gate with lockable bolt set into tightly barred wrought iron fence	No
Duke of Wellington Place	Single wrought iron gate set into tightly barred wrought iron fence	No
Memorial Gate	Open access	Yes, junction box
Constitution Hill- west	Gap in waist high railing	No
Constitution Hill - centre	Gap in waist high railing	No
Constitution Hill - east	Single span steel swivel gate	No
Canada Gate	Open access to west – five double wrought iron gates – almost permanently locked – flanked by stone walls	Possibly
South & West Africa Gate	Open access – waist high rail to east	No

HYDE PARK		
Gate	Description	Power and Mounts
Queen Elizabeth Gates	Two double wrought iron traffic gates and two wrought iron pedestrian gates with locks	No
Achilles Way - statue	Open access – unclear boundary	No
Achilles Gate	Open access	Junction box
Curzon gate	Open access	No
Alford Street South Gate	Pedestrian wrought iron gate with lock	No
Grosvenor Gate	Wrought iron traffic gates with locks	No
Upper Brook Street Gate	Wrought iron traffic gates with locks	No
Speakers' Corner	Two pedestrian gates with locks	No

HYDE PARK		
Gate	Description	Power and Mounts
Cumberland Gate	Pedestrian gate with lock	No
Stanhope Palace Gate	Pedestrian gate with lock	No
Albion Gate	Open access	No
Clarendon Gate	Two pedestrian and four traffic gates with locks	No
Victoria Gate/North Carriage Drive	Two wrought iron traffic gates with locks	No
Victoria Gate	Two pedestrian gates	Junction box
West Carriage Drive	Open access to Policeman's Path	No
Car Park	Two open access points and one open access to Serpentine	No
North Serpentine Tunnel	Open access to Kensington Gardens	No
South Serpentine Tunnel	Open access to Kensington Gardens	No
West carriage Drive – café – Alexandra Gate	Open access with flower bed in south section	No
Alexandra Gate	Double traffic gate with locks	No
Kingston Gate	Double wrought iron traffic gate with locks	No
Prince of Wales Lodge West	Private locked gate	Possibly
Prince of Wales Gate	Two double traffic gates and two pedestrian gates – cables on pillar	Possibly
Rutland Gate	Double wrought iron gate with padlock	No
Hyde Park Barracks	Three steel security gates under armed forces management	Yes
Edinburgh Gate	Double wrought iron gate – signs indicate City of Westminster	No
One Hyde Park Corner construction site	Three temporary gates	No
Mandarin Hyde Park	One steel private gate under management of hotel	No
Albert Gate	Two double wrought iron traffic gates and three single pedestrian gates with locks	No
White Horse Gate	Double wrought iron gate	No
Three Tube gates	Two have open access and one has a double wrought iron gate	

HYDE PARK		
Gate	Description	Power and Mounts
Hyde Park Corner	Three wrought iron double pedestrian gates and two single pedestrian gates	No

KENSINGTON GARDENS		
Gate	Description	Power and Mounts
Westbourne Gate West Carriage Drive	Double traffic gate with lock	Possibly from Lodge
Westbourne Gate Bayswater Road	Single pedestrian gate with lock	Possibly from Lodge
Marlborough Gate	Pedestrian gate with lock	No
Lancaster Gate	2 pedestrian and 1 traffic gate with lock	No
Dorchester Gate	Pedestrian gate with lock	No
Inverness Terrace Gate	Pedestrian gate with lock	No
Bayswater Road conveniences access	Pedestrian gate with lock	Possibly
Black Lion Gate	Traffic gate with lock and revolving pedestrian gate	No
Orme Square Gate	Traffic gate with lock and pedestrian gate	No
Studio Gate	Pedestrian gate with lock	No
King's Arms Gate	Pedestrian gate with lock	No
Victoria Road Gate	Pedestrian gate with lock	No
Palace Gate	Traffic gate with lock	No
Hyde Park Gate	Pedestrian gate with lock	No
Queen's Gate	Traffic gate with lock	No
Albert Approach West	Pedestrian gate with lock	No
Albert Approach Centre	3 traffic gates and 2 pedestrian gates	2 junction boxes
Alexandra Gate	2 double traffic gates across road	Possibly
Coalbrookdale Gate	Elaborate wrought iron gate: 2 double traffic gates with locks and 2 pedestrian gates with locks	No
Mount Gate	Double traffic gate with padlock	No
Serpentine Gallery Access	Double traffic gate with padlock	No
Temple Gate	Double traffic gate with padlock and turnstile exit only gate	No
Serpentine Bridge	Open access under bridge on both banks	No

KENSINGTON GARDENS		
Gate	Description	Power and Mounts
Magazine Gate	Double traffic gate with padlock	No
The Magazine	4 double gates but no public access	Possibly
Buckhill Dog Gate	Single pedestrian gate with lock	No
Buckhill Dog Gate North	Single pedestrian gate with lock	No

THE REGENT'S PARK		
Gate	Description	Power and Mounts
Broad Walk/Chester Road Cow & Bean	Double wrought iron traffic gate with central pillar Padlock	No power Sign post possible mount
Chester Road/English Garden	Double wrought iron traffic gate with central pillar Padlock	No
Chester Road/English Garden (East)	Single wrought iron gate Two wrought iron posts Padlock	No
Chester Road, Sports Field (East)	Single wrought iron gate Two wrought iron posts Padlock	No
Cumberland Terrace/Outer Circle	Single wide wrought iron traffic gate Padlock	No
Cumberland Terrace/Outer Circle (North)	Single wrought iron gate Two wrought iron posts Padlock	No
Gloucester Gate	Single wide wrought iron traffic gate Padlock	No
St Mary's Bridge Gate	Double wrought iron traffic gate with central pillar Padlock	No mount Black junction box (locked)
Primrose Hill Bridge Gate	Double wrought iron traffic gate with central pillar Padlock	No
North of park Outer circle West of tennis courts	Wide single wrought iron gate Permanently padlocked	No
North of park Outer circle	Wide single wrought iron gate Permanently padlocked	No

THE REGENT'S PARK		
Gate	Description	Power and Mounts
Second gate west of tennis courts		
Running track gate	Single wrought iron pedestrian gate Padlock	No
Running track gate	Wide wrought iron traffic gate Permanently padlocked	No
Macclesfield Bridge Gate	No entrance to inner park Wide single wrought iron traffic gate on outer circle	Power assisted gate No mount
Charlbert Street Bridge	Single wide wrought iron traffic gate Padlock	No mount Black junction box (locked)
London Central Mosque	Double wrought iron traffic gate with no central pillar Padlock	No
Hanover Gate	Double wrought iron traffic gate with no central pillar Padlock	No
Tent Gate	Single wide wrought iron traffic gate Padlock	No
Clarence Gate	Double wrought iron traffic gate with central pillar Padlock	No
York Terrace Gate	One small wrought iron pedestrian gate Padlock	No
York Bridge Road (West)	Small double wrought iron gate Padlock	No
York Bridge Road (East)	Small double wrought iron gate Padlock	No
Park Square (West)	Small double wrought iron gate Padlock	No
Park Square Gate/English Garden	Double wrought iron traffic gate with central pillar Padlock	No
St Andrew's Gate	Double wrought iron traffic gate with central pillar Padlock	No
Chester Walk Gate	Small double wrought iron gate Padlock	No
Entrance to Tennis Court	Small double wrought iron gate Padlock	No
York Road Bridge (North	Wide single wrought iron gate	No

THE REGENT'S PARK		
Gate	Description	Power and Mounts
of Boating Lake)	Padlock Regent's College Sign on Royal Parks property	
Pavilion Gate	Small double wrought iron gate Padlock	No
Pavilion Service Gate	Small double wrought iron gate Padlock	No
Jubilee Gate	Ornamental gate with gilded wrought iron Large double traffic gate (lockable) flanked by two single pedestrian gates (lockable)	Possible mount on stone column Green junction box beside east column
Garden Café/Inner Circle	Wide single wrought iron gate Padlock	No mount Power from café?
Garden Café/Inner Circle/Steps	Wide single wrought iron gate Padlock	No mount Power from café?
Garden Café/Inner Circle/Service Gate	Small double wrought iron gate Padlock Not used by visitors?	No mount Power from café?
Holme Green Gate	Wide single wrought iron gate Padlock	No mount Power from kiosk?
Open Air Theatre	Wide single wrought iron gate Shut with bolt (padlock nearby – unused) Visitors inside theatre area	No
Open Air Theatre Staff Entrance	Small double wrought iron gate kept shut with bolt (padlock nearby) Padlock Not used by visitors?	Possible mount and power source
Gate leading to Long Bridge	Double wrought iron gate with no central pillar Padlock	No
Chester Road Gate	Ornamental jubilee gate with gilded wrought iron Double traffic gate (lockable) flanked by two (lockable) pedestrian gates No stone columns	No
Chester Road/Marylebone Green	Double wrought iron gate with no central pillar	No

PRIMROSE HILL		
Gate	Description	Power and Mounts
Prince Albert Road Gate	No gate Wrought iron fence	No
Ormond Terrace Gate	No gate Wrought iron fence	No
Avenue Road Gate 1 wrought iron gate	Single wrought iron gate Shut with bolt	No
West of Avenue Road Gate	Entrance step with no gate Flanked by privet hedge	No
Prince Albert Road	No gate Wrought iron fence	No
Regent's Park Road (South) Gate	No gate Wrought iron fence	No
Regent's Park Road (North) Gate	No gate Wrought iron fence	No
Primrose Hill Road (South) Gate	No gate Wrought iron fence	No
Primrose Hill Road (Centre) gate	No gate Wrought iron fence	No
Primrose Hill Road (North)	No gate Wrought iron fence	No
Elsworthy Terrace Gate	No gate Wrought iron fence	No

GREENWICH PARK		
Gate	Description	Power and Mounts
St Mary's Gate	Wide span wrought iron traffic gate 2 brick columns 3 hinged pedestrian gates	No
Circus Gate	1 hinged wrought iron gate between two brick pillars	No
King George Street Gate	1 hinged wrought iron gate Not covered	No
Crooms Hill Gate	1 hinged wrought iron gate set into wall	Possible mount on archway

GREENWICH PARK		
Gate	Description	Power and Mounts
	Covered by brick arch	
The Ranger's House	3 wrought iron double gates into rose garden Gates are supported by low iron pillars	No
Chesterfield Gate	1 hinged wrought iron gate Wrought iron archway Two brick pillars flank path leading to gate	No
Blackheath Gate	2 double wrought iron traffic gates 2 single wrought iron pedestrian gates with bar across top 6 brick pillars	No
Vanbrugh Park Gate	1 hinged wrought iron gate set into wall Covered by brick archway	Possible mount on archway
Maze Hill Gate	1 hinged wrought iron gate set into elaborate brick archway	Possible mount on archway
Maze Hill House Gate	1 hinged wrought iron gate with wrought iron arch 2 brick column	Possible mount on column
Creed Park Gate	1 hinged wrought iron gate in wrought iron fence	No
Park Row Gate	Wrought iron traffic gate set in wrought iron fence 1 wrought iron pedestrian gate	No
National Maritime Museum Gate	Double traffic gate set into wrought iron fence Not under Royal Parks Management	No
National Maritime Museum Gate (West)	Double traffic gate set into wrought iron fence No under Royal Parks Management	No

GREENWICH PARK		
Gate	Description	Power and Mounts

RICHMOND PARK		
Gate	Description	Power and Mounts
Ladderstyle Gate	Double wooden traffic gate Wooden pedestrian gate (boarded up) Wooden pedestrian gate (closed) Shut with padlocks	5 brick pillars Possible power source in wall mounted phone box
East of Ladderstyle	Double wooden traffic gate (private) 50 metres to east	No
East of Ladderstyle	Double wooden traffic gate (private) another 50 metres to (overgrown)	No
Robin Hood gate	2 double wrought iron traffic gates 2 single wrought iron pedestrian gates Secured with padlocks	Junction box to east of gate Small wooden park lodge to west has power supply and low window
East of Robin Hood	Single wrought iron gate Locked with padlock Leads to house and bridge	No
Concrete Bridge	Double tubular framed iron gate Not in use and secured with padlock	No
Entrance to golf course and driving range	Double tubular framed iron gate In use and secured with bolt and padlock Cattle grid	No
Golf Course Entrance	1 wrought iron single pedestrian gate Double wrought iron gate permanently padlocked Double wrought iron traffic gate with cattle grid Small wrought iron pedestrian gate leads on to golf course	Power source in Golf Course buildings and public conveniences
Roehampton Gate	2 wrought iron double traffic gates 2 single wrought iron	No obvious mounts Possible brick junction box in garden

	pedestrian gates Wooden double gate to lodge	Power source in Roehampton Lodge CCTV beside lodge covering lane
East Sheen Gate	1 single wooden gate to lodge 1 double wooden gate to lodge 2 double wrought iron traffic gates 3 wrought iron single pedestrian gates	3 brick pillars Power source in emergency phone
Bog Gate	Double wooden traffic gate – permanently padlocked and overgrown 1 wrought iron single pedestrian gate	3 brick pillars No power
Cambrian Gate	2 single wrought iron pedestrian gates	2 brick pillars No power
Bishop's Gate	1 single wrought iron pedestrian gate	2 brick pillars No power
Richmond Gate	3 double wrought iron traffic gates 2 wrought iron single pedestrian gates	6 stone pillars Power source in emergency telephone
Gate near The Dysart	Double wooden gate	No
Petersham Gate	1 wrought iron single pedestrian gate	No obvious mounts Power source in public convenience
“Golf Course Gate” (Between Ham and Petersham Gates)	1 single tubular steel pedestrian gate with bolt and padlock	No
Ham Gate	1 double wrought iron traffic gate 2 wrought iron single pedestrian gates	2 lanterns on gate pillars (possible mounts and sources of power)
Kingston Gate	2 double wrought iron traffic gate 2 wrought iron single pedestrian gates Secure with padlocks	2 brick pillars Large junction box

BUSHY PARK		
Gate	Description	Power and Mounts
Hampton Court Gate	2 decorative double wrought iron traffic gates and 1 single wrought iron pedestrian gate. 4 wrought iron decorative	Possible power source in huts and gate furniture is suitable for mounting.

BUSHY PARK		
Gate	Description	Power and Mounts
	pillars. There are both locks and padlocks	
Private Gates (No external connection and no public access)	3 wooden traffic gates marked private	No
Royal Paddock (No external connection and no public access)	1 double wooden traffic gate (locked) set in brick wall (no arch); 1 steel gate with horizontal bares (locked) set in steel cable fence; 1 double wooden traffic gate with lock and handle	No, though steel gate leads to house that has electricity
Church Grove Gate	1 double wrought iron traffic gate with padlock; 1 single wrought iron pedestrian gate without lock	No, but sufficient furniture for mounts
Hampton Wick Sports Club Gate	1 double wooden traffic gate with padlock. Seems to be managed by club, but health and safety message from DCMS is posted nearby.	No and mounting sensors may no be easy
Hampton Wick Gate	1 single wrought iron pedestrian gate set in brick archway (no lock, but locking times indicated)	No, but sufficient furniture for mounts
Sandy Lane Gate	1 single wrought iron pedestrian gate set in brick archway (no lock, but locking times indicated)	No, but sufficient furniture for mounts
SHAEF Gate	1 single wrought iron pedestrian gate set in brick archway (no lock, but locking times indicated)	No, but sufficient furniture for mounts
Teddington Gate Lodge (No external connection and no public access)	1 double wooden traffic gate to rear garden; 1 wrought iron garden gate to front garden	Power in house
Teddington Gate	2 decorative double wrought iron traffic gates; 2 wrought iron pedestrian gates; brick pillars either side and 3 wrought iron columns in between (locks uncertain, but locking times indicated)	Power source on pillar and in hut; sufficient furniture for mounts
Guns Lodge (Access to Bushy House and no public access)	1 decorative arrowhead wrought iron traffic gate; 2 wrought iron pedestrian	CCTV mentioned on sign

BUSHY PARK		
Gate	Description	Power and Mounts
	gate; 2 wrought iron columns	
Sports Ground Wood (Public access unclear and no external connection)	1 single steel mesh gate flanked by concrete posts (permanently locked); 1 steel ladder gate (climbed to ease congestion); 1 double steel traffic gate (no lock); 1 steel ladder gate; 1 steel ladder gate; 1 steel ladder gate	No power; mounts difficult
Proposed Gate (Leading to Sports Ground)	Paths lead up to proposed gate that will presumably be cut in brick wall	No
Coleshill Gate	1 single wrought iron pedestrian gate set in brick archway with lock	No, but sufficient furniture for mounts
Blandford Road gate	1 single wrought iron pedestrian gate set in brick archway with padlock	No, but sufficient furniture for mounts
Laurel Road Gate	1 single wrought iron pedestrian gate (or possibly double with one side working) set in brick wall with padlock	No, but sufficient furniture for mounts
Hampton Hill New Gate	1 single wrought iron pedestrian gate set in brick archway with padlock	No, but sufficient furniture for mounts (nearby cricket club building may have power)
Hampton Hill Gate	1 double wrought iron traffic gate (electronically operated); 1 single wrought iron pedestrian gate; 3 brick columns	Yes, and sufficient furniture for mounts
Private Mansion (No external connection and no public access)	1 double decorative steel gate opened electronically	Yes
Upper Lodge Mews (No external connection and no public access)	1 double wooden traffic gate; 5 wooden garden gates to houses; cattle grid leading to courtyard	No
Woodland Gardens (Public access leading to external connection via Duke's Head Passage)	1 steel mesh gate with padlock; 1 steel and wood double traffic gate with padlock and 1 wood pedestrian gate supported by steel pillars with padlock; 1 steel and wood double traffic	No, and mounts no easy

BUSHY PARK		
Gate	Description	Power and Mounts
	gate with padlock and 1 wood pedestrian gate supported by steel pillars with padlock; 1 wood pedestrian gate supported by steel pillars with padlock	
River Lodge (No external connection and no public access)	1 wooden pedestrian gate; 1 double wooden traffic gate	No (power in house)
Duke's Passage Gate	1 single wrought iron pedestrian gate set in brick archway with bolt	No, but sufficient furniture for mounts
Stockyard (No public access to park)	3 traffic gates	No
Hampton Gate	1 single wrought iron pedestrian gate set in brick archway with bolt	No, but sufficient furniture for mounts
Barrack Gate	1 double wrought iron traffic gate with padlock; 1 single wrought iron pedestrian gate with bolt; 3 brick columns	No, but sufficient furniture for mounts