

Rainbow Industrial Estate – transport report

The purpose of this report is to inform transport matters relating to Merton’s supplementary planning document for the Rainbow Industrial Estate.

Any development on the Rainbow Industrial Estate would have to be preceded by a planning application, setting out the details of the proposed scheme and accompanied by a transport assessment. This report should be read and considered alongside the supplementary planning document and design report for the site.

1. Transport impacts of the site

1.1 The Rainbow Industrial Estate is located in Raynes Park, south west London. The site is located to the south of Raynes Park local centre, between three railway embankments. The site is approximately 4.8ha and is currently occupied by about 15 – 20 businesses of varying sizes, operating a range of industrial, storage, transport and waste management uses.

1.2 The Rainbow Industrial Estate is easy to get to by a variety of travel choices but, due to the site being bounded by three railway lines, it has a single entrance and exit point and is effectively a cul-de-sac.

Road Access

1.3 The estate is located just off Grand Drive (B279) and Approach Road, within 1km of the A3 strategic road, which connects central London to the south (Portsmouth), passing Woking and Guilford. The entrance is approximately 300m north of Bushey Road (A298).

1.4 Due to the railway lines, there is a single entrance and exit road for the estate. Access to the estate is via a left turn from Grand Drive (B279, travelling north) or a right turn across traffic from Approach Road (travelling west). On Approach Road, a pelican crossing is located just beside the turn.

1.5 Vehicles and pedestrians entering the estate pass the former Station House located just inside the entrance, a red brick building that has been granted planning permission in 2013 to be converted into three studio flats and three one-bedroom flats.

1.6 The site entrance passes under a railway bridge which has a 4.1m height restriction.

1.7 As the site is adjacent to Raynes Park town centre, it is within 5 minutes walk (400m) of a number of bus stops, serving Wimbledon, Kingston-upon-Thames, Tooting, Mitcham and Morden (routes 57, 131, 152, 163, 200, K5). A night bus service (route N87) serves Raynes Park between Aldwych and Kingston.

Rail Access

1.8 The site is located adjacent to the southern entrance to Raynes Park rail station. Raynes Park station is a mainline station providing regular services

between London Waterloo and Southampton, and also on the London Waterloo-Epsom/Guilford line. The London-Southampton line and southern station platforms bound the site to the north, and the London-Epsom lines bound the site to the east and west.

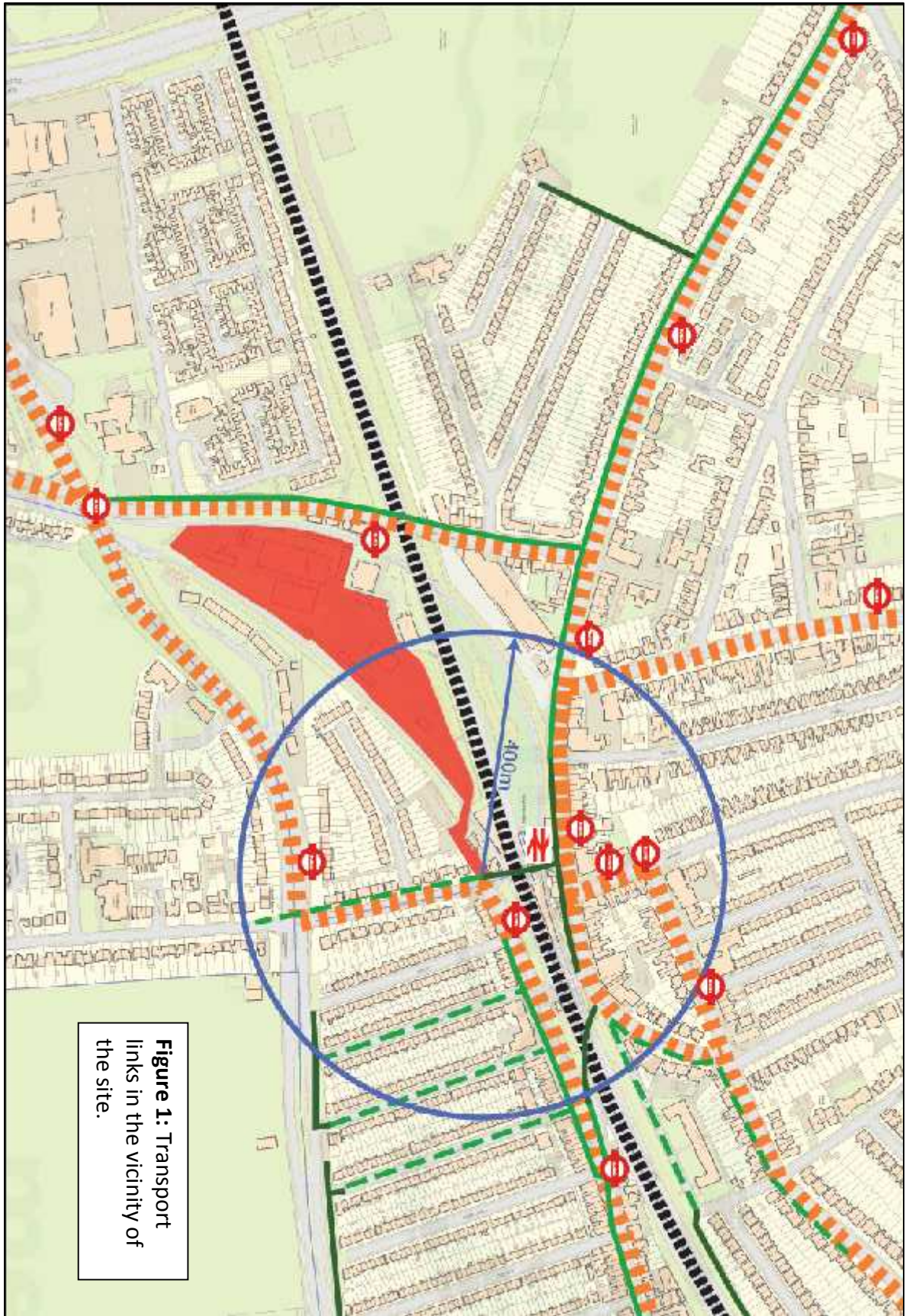


Figure 1: Transport links in the vicinity of the site.

- 1.9 The design report prepared in conjunction with the planning brief sets out the impacts, opportunities and constraints that the transport infrastructure has on the site's character.

Current site uses and associated vehicle movements

- 1.10 As previously stated, 15 – 20 semi-industrial business uses are located on the site including scaffolders, car repairs, a coach park, metalworks, road works. These businesses are served mainly by road, generating car, van, HGV and coach traffic to and from the site.
- 1.11 Part of the site that is not the subject of the planning brief is being used for signalling operations and a transport depot by Network Rail. The signalling operation is due to move off the site by 2017. Network Rail has another transport depot at Dundonald Yards in Wimbledon. While not part of the planning brief, the Network Rail landholdings generate traffic associated with the site including cars, vans and HGV's.
- 1.12 There is evidence that the site itself and the area at the site's entrance (outside the former Station House) is regularly used for the parking of vehicles not associated with the businesses on the estate. Parking, particularly at the entrance, restricts access to the site for larger vehicles and causes congestion at the entrance. The areas of land where parking takes place are privately owned and are not currently enforced by the landowners for parking restrictions, although the landowners have indicated that they do not support unauthorised parking on the site.
- 1.13 Merton Council commissioned an independent firm to undertake an objective traffic count of pedestrian and vehicle movements to and from the site and around its entrance for two weeks in May 2013 between 7.00am and 7.00pm. The council also carried out an objective assessment of the number and duration of vehicles parking at the site's entrance (outside the former Station House) during the same period. This was similar to transport data obtained in 2008 for the same area.
- 1.14 It should be noted that the following data are expressed as "vehicle movements" or "pedestrian movements" rather than the number of vehicles or pedestrians. For example, during this time 6 vehicle movements into the site could be accounted for by 6 separate vehicles entering the site, or one vehicle entering the site 6 times. The impact on local amenity and transport matters is the same in either case. Data was recorded over either a 12-hour (7am – 7pm) or 24 hour period.
- 1.15 The objective traffic counts have generated the following results, which provide a baseline for assessing the current vehicle and pedestrian movements associated with the site, and the parking issues. A brief summary of the data is presented within this report.
- 1.16 During a 12 hour period, 7am to 7pm during a working weekday, there were close to 1,000 vehicle movements associated with the site (both in and out of the site).

- 1.17 Of these vehicle movements, 275 vehicle movements entered the site through the railway bridge and 299 vehicle movements exited the site through the railway bridge (Figure 2).
- 1.18 In all cases the majority of vehicle movements were from cars, outlined as follows (bicycle and motorcycle movements excluded):
- 120 car movements entering the site and 142 exited;
 - 75 van movements entered the site with 27 exited;
 - 47 HGV movements entered the site and 47 exited; and
 - 25 coach movements entered the site and 24 exited.
- 1.19 The type of vehicle accessing the site was assessed and is illustrated in Figure 3. A timeseries illustration of the data is shown in Figure 4. The figures prove that whilst a majority of the vehicles accessing the site are cars, there are still a large proportion of vehicles larger than a car (van, HGV, coach) accessing the site for various purposes during the day.
- 1.20 Also evident was the relatively high number of large vehicles which access the site, in particular HGV's and coaches, with substantially more than 100 movements in one 12 hour period (Figure 5).
- 1.21 180 vehicle movements occurred at the site entrance without passing under the railway bridge. These movements comprised of either a u-turn or parking scenario (Figure 2).
- 1.22 There were approximately 100 u-turns made in front of the Former Station House.
- 1.23 Approximately 80 incidences of vehicles parking for longer than three minutes took place outside the former Station House (Figure 8).

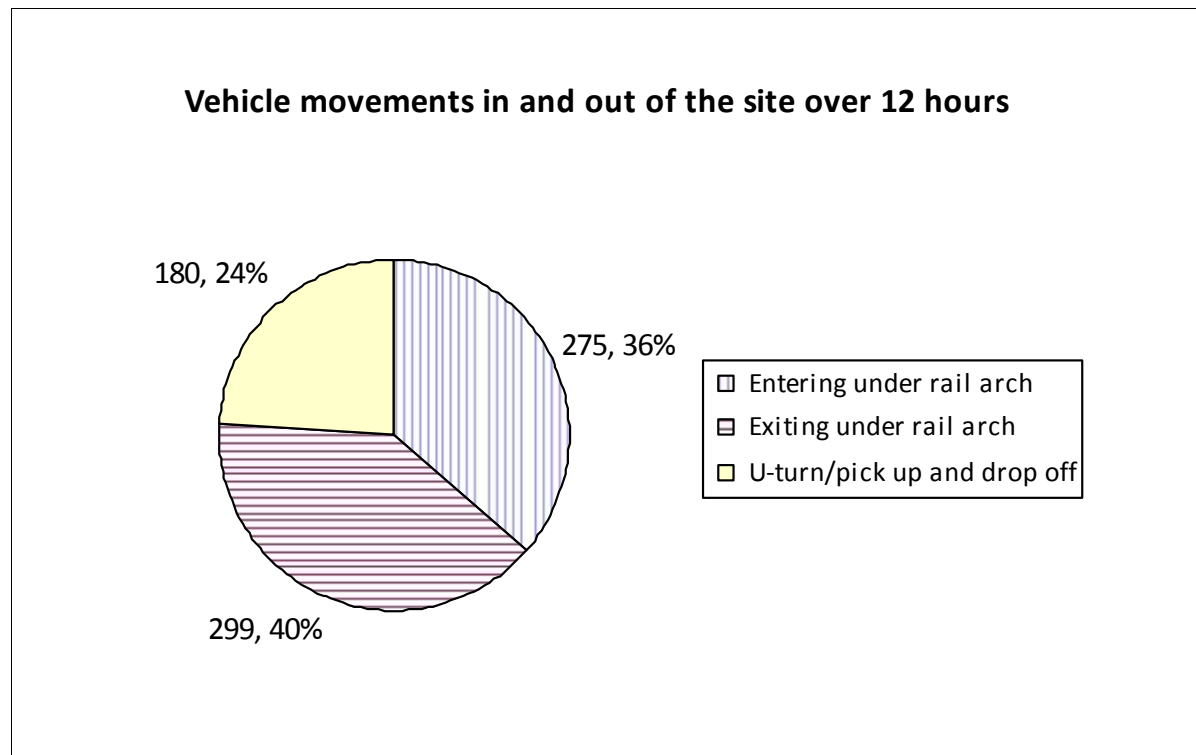


Figure 2: The number and proportion of vehicle movements accessing the site under the rail arch, including U-turns, pick ups and drop offs at the entrance during a 12 hour period (7am – 7pm). The figure illustrates the number and proportion of movements.

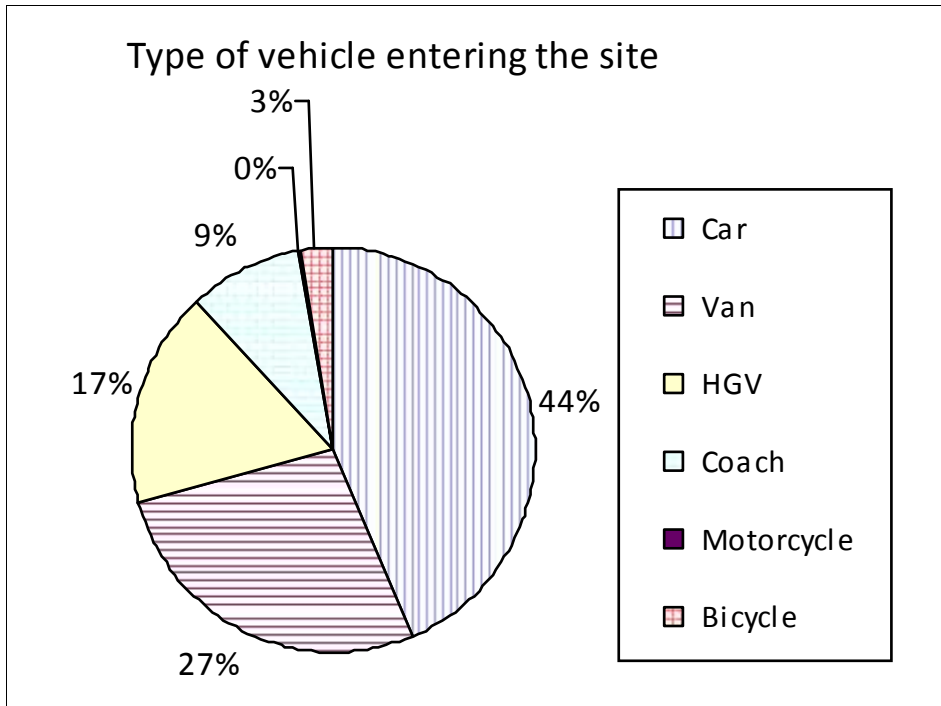


Figure 3a: Type of vehicle entering the site - total of 275 vehicles in a 12 hour period.

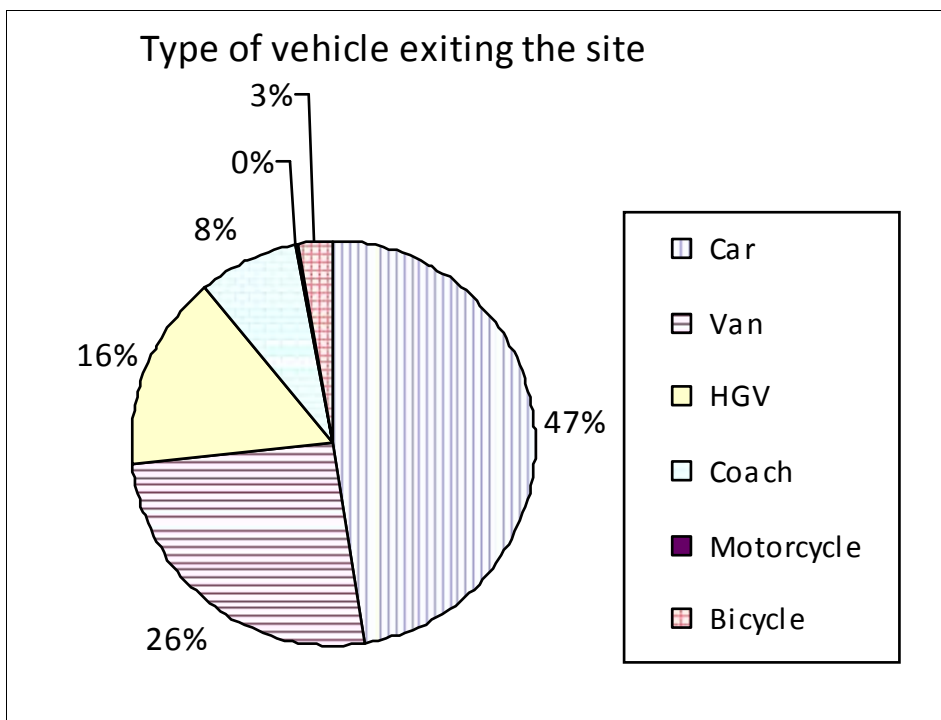


Figure 3b: Type of vehicle exiting the site - total of 299 vehicles in 12 hour period. The percentages are approximately equal for the type of vehicle entering and exiting the site.

Number of vehicle movements within the Rainbow site

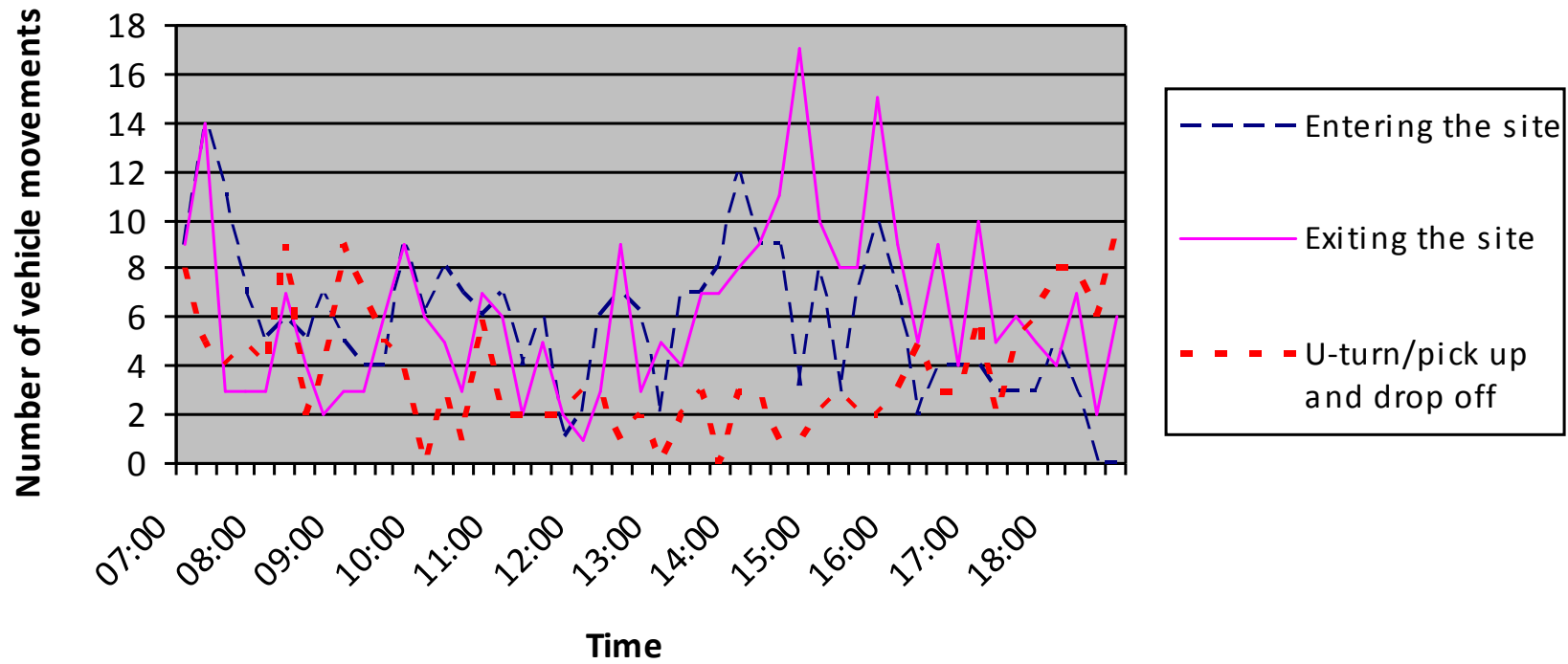


Figure 4: Time series of all vehicles accessing the Rainbow site during the same 12 hour period.

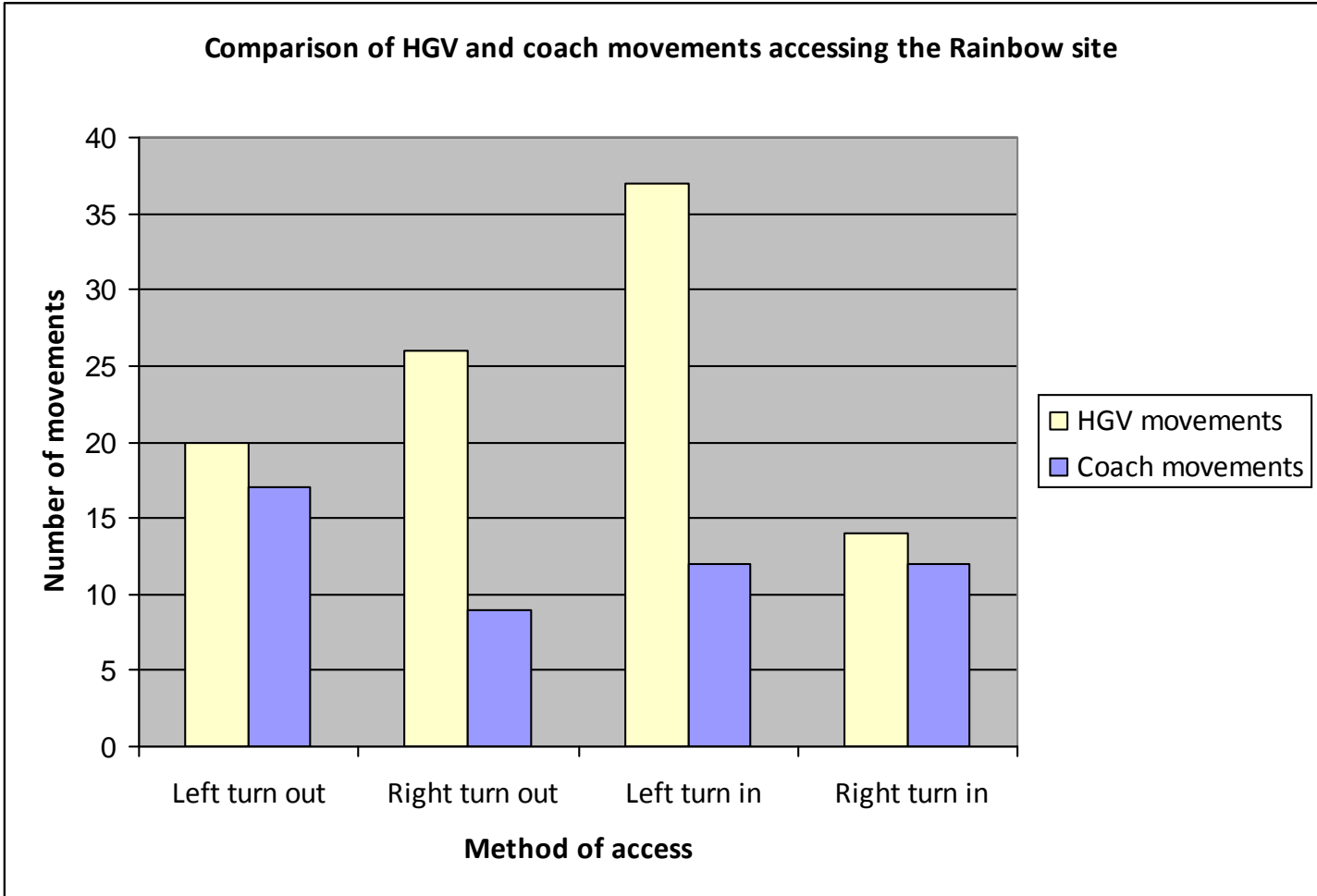


Figure 5: Comparison of HGV and coach movements accessing the Rainbow site during one day.

Pedestrian movements

- 1.24 There is a lot of pedestrian activity around the site, mainly around the Cattle Arch, Raynes Park station entrance and pelican crossing. A diagram of the pedestrian movements recorded between 7am and 7pm on a normal working weekday is illustrated in Figure 6.
- 1.25 Between 7am and 7pm on a normal working weekday, there were approximately 5,000 (4,894) pedestrian movements north through the Cattle Arch during the course of the day, and approximately 3,000 (3,294) south.
- 1.26 About 3,000 (3,243) pedestrian movements were recorded leaving Raynes Park station (southern entrance) and almost 70% (2,204) of these movements turned left and entered the cattle arch after exiting the station.
- 1.27 During the same 12 hour period the pelican crossing had approximately 2,500 (2,571) pedestrian movement crossing from north to south (from the station to the southern side of Approach Road). Over 90% of these movements (91.8%) were then eastwards down Approach Road toward the Apostles streets on the southern side.
- 1.28 Slightly fewer pedestrian movements (2,080) were recorded moving from the southern side walking north across the pelican crossing. 80% of these movements (80.8%) then entered the Cattle Arch.
- 1.29 Over 1,000 (1,273) pedestrian movements were made walking up Grand Drive towards the station, on the western side of the road and crossing the entrance to the Rainbow site. Over 60% of these movements were made in the morning between 7am and 10am.
- 1.30 There does not appear to be any distinct patterns to people entering and exiting the Rainbow site. During the working day, approximately 113 pedestrian movements were recorded leaving the site, with 63 movements entering the site.
- 1.31 The majority of these journeys were made in the evening rush hour peak (4pm-7pm). Nearly 50% of all pedestrian movements left the site (during the afternoon peak time and a third of all pedestrian movements entered the site during the evening peak. The numbers involved entering and exiting the Rainbow site are a fraction of the numbers using the pelican crossing, entering and exiting the Cattle Arch and station.

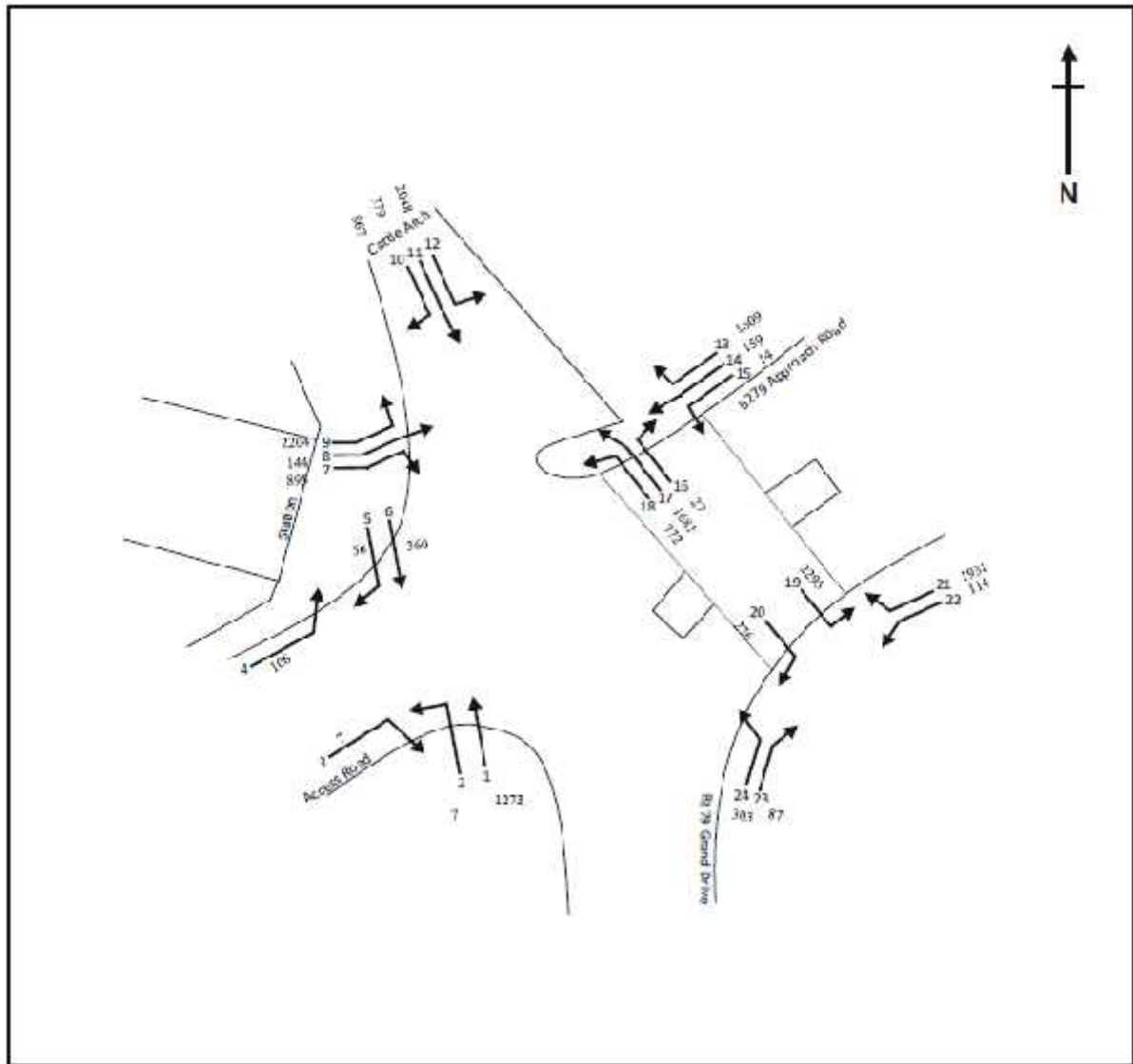


Figure 6: Illustration of the pedestrian movements and numbers in the vicinity of the entrance to the Rainbow site.

Parking events occurring at the site entrance

- 1.32 Portions of the access road to the site between the railway bridge and Grand Drive have historically been used for parking. This has ranged from pick up/drop off events, u-turns, and long stay parking events. These activities are not supported by the owner, however are also not enforced.
- 1.33 A video survey was undertaken of the parking events occurring within the access road. The number, type and duration of events was recorded during a 12 hour survey (7am to 7pm) on a working weekday. The type of movements recorded include pedestrian, cycle, motorcycle, LGV (Light Goods Vehicle, less than 7.5 tonne), HGV (Heavy Goods Vehicle, greater than 7.5 tonne), and bus/coach movements (PSV).
- 1.34 A parking event was defined as being any event where a vehicle was parked and stationary for more than three minutes. Any vehicle stationary or

manoeuvring within the site for less than this period of time was considered to be either a u-turn or pick up/drop off event. This methodology was proposed in order to avoid double counting of events. This survey did not record vehicles parking within the Rainbow Industrial Estate that have no connection to the estate, although there is anecdotal evidence that this takes place.

- 1.35 The results illustrate that a large majority of the vehicles that used the site entrance for parking were cars (Figure 7). It was also evident that there was no motorcycle or coach parking during the study period.
- 1.36 It was also evident that the majority of all parking events were short in duration, being less than 15 minutes. Most shops and services in Raynes Park are at least a 5 – 10 minute walk away (10-20 minute round trip). This high proportion of cars parking for less than 15 minutes suggests that vehicles parked at the entrance to the site are mostly using it as an informal pick up area for passengers at the station (Figure 8).
- 1.37 With respect to the redevelopment on the Rainbow site, the London Plan 2011 provides the guidance for the number of parking spaces that would be required on site. It provides for less than one space per square metre for residential properties with good access to public transport, and specifies other requirements for business floorspace. Similar developments in the Raynes Park area have provided 0.18 parking spaces per residential unit. Although the exact number of parking spaces will be determined at the planning application stage, initial proposals are that this is unlikely to exceed 0.5 spaces per residential unit or 125 parking spaces for 250 units.
- 1.38 the following parking specifications are required:
- All parking will be provided on site;
 - Parking must be provided in line with the London Plan parking standards.;
 - A parking management plan and a travel plan would be submitted and assessed with any redevelopment proposals;
 - A requirement to provide car club spaces on site or an alternative off site provision to serve the development;
 - A desire to accommodate some visitor parking on site with a minimum 20% of the parking onsite not being allocated to a specific unit;
 - All three bed units would be provided with at least one allocated parking space; and
 - Electric charging points in accordance with London Plan standards.
- 1.39 With respect to parking provision for the business uses on the site, the London Plan will be used for guidance.

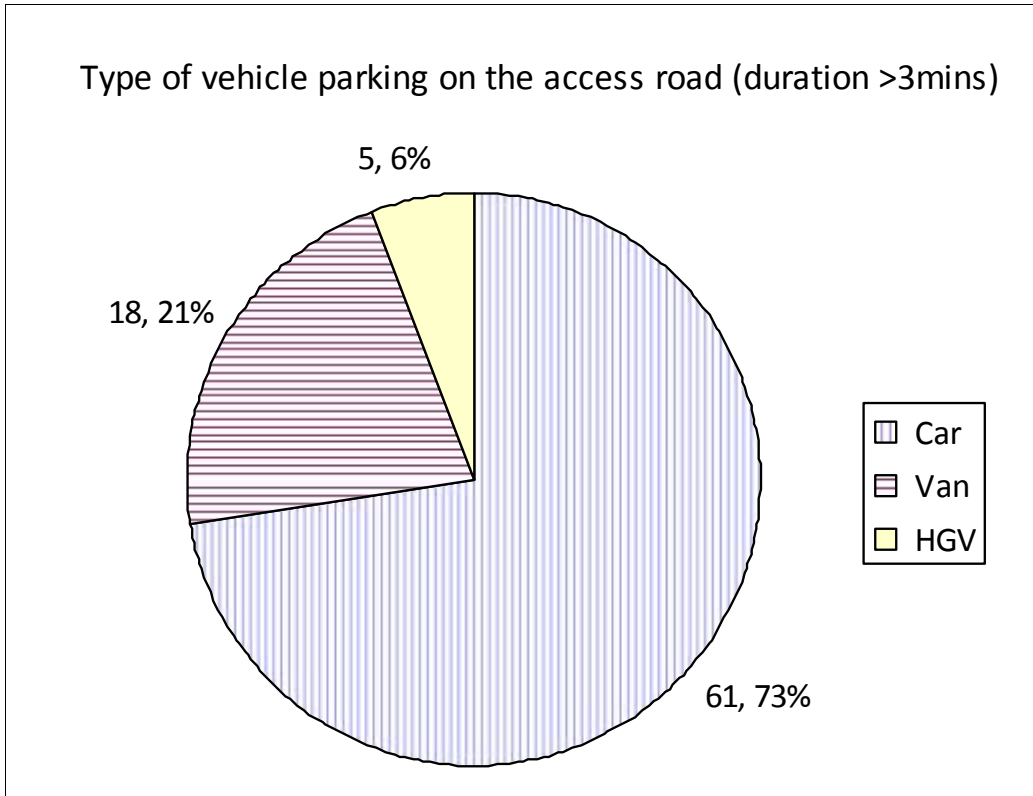


Figure 7: The number and type of vehicles parking on the Rainbow site. The figure illustrates the number and proportion of parking events.

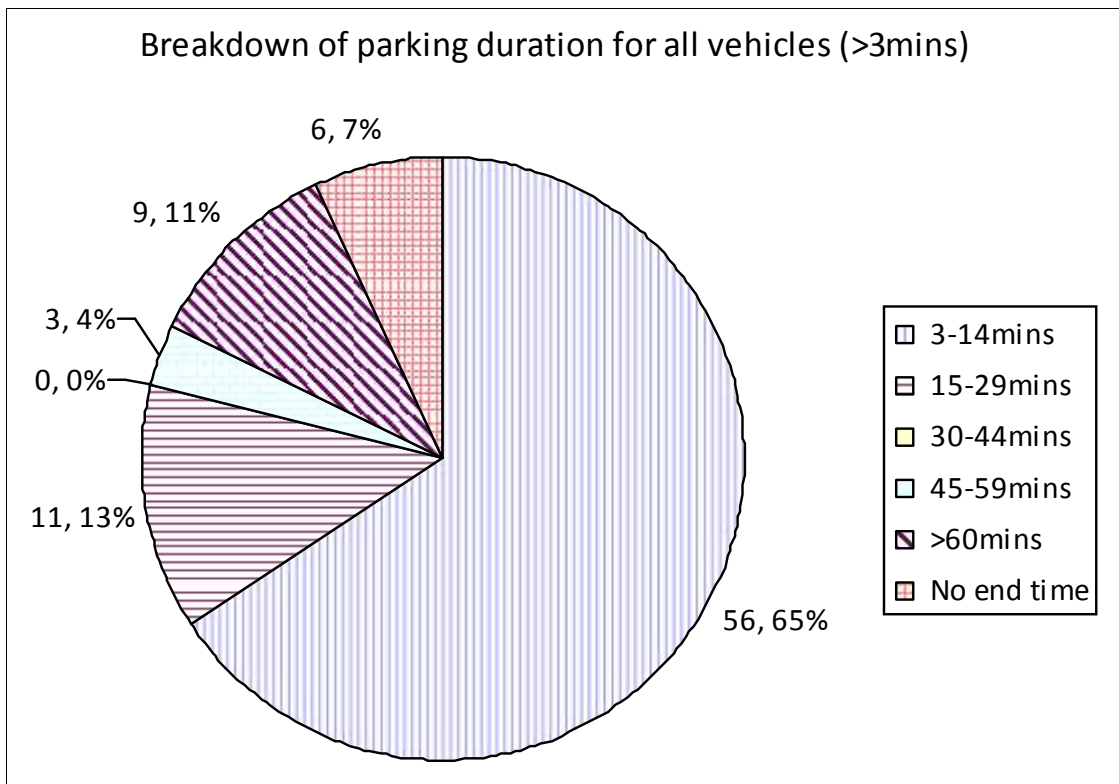


Figure 8: Duration of vehicles parking on the Rainbow site. The figure includes all types of vehicles. No end time represents vehicles which remained beyond the survey period (after 7pm). It is evident that a majority of parking stays were for less than 15 minutes (but greater than 3 minutes). The figure illustrates the number and proportion of parking events.

2. Transport and travel trends

Introduction

- 2.1 This section of the report summarises future travel, parking and transport trends using information from a variety of data sources, including Census 2011, monitoring results from existing developments in London and Transport for London data.
- 2.2 In order to assess the future travel and parking movements relating to the site proposals, the council has:
- Carried out an objective traffic, cycle and pedestrian count of movements to and from the site, around the site entrance and along Grand Drive and Approach Road;
 - Reviewed wider transport and travel trends, including results from Census 2011 and Transport for London research;
 - Carried out a comparison with other similar site proposals in Merton and in London;
 - Examined the transport and parking issues relating to the site proposals, including potential new access points to the site; and
 - Compared the existing situation and future trends with the new proposals
- 2.3 Where possible, a comparison between the evidence collected in relation to this site has been used to forecast likely trends for the Rainbow site and resulting impacts on the road and transport network.

Census 2011

- 2.4 Below is a list of relevant summary statistics obtained from the most recent Census data
- In Merton, a third of households don't have access to a car or van (Figure 9);
 - In Merton, there has been relatively little change to the proportion of cars/vans either owned or available to households, however the actual number of cars/vans available to households decreased by more than 3,000 from 2001 to 2011 (Figure 9);
 - The reduction in the number of vehicles owned or available to households was coupled with an increase in the population in the borough of 6.3%.

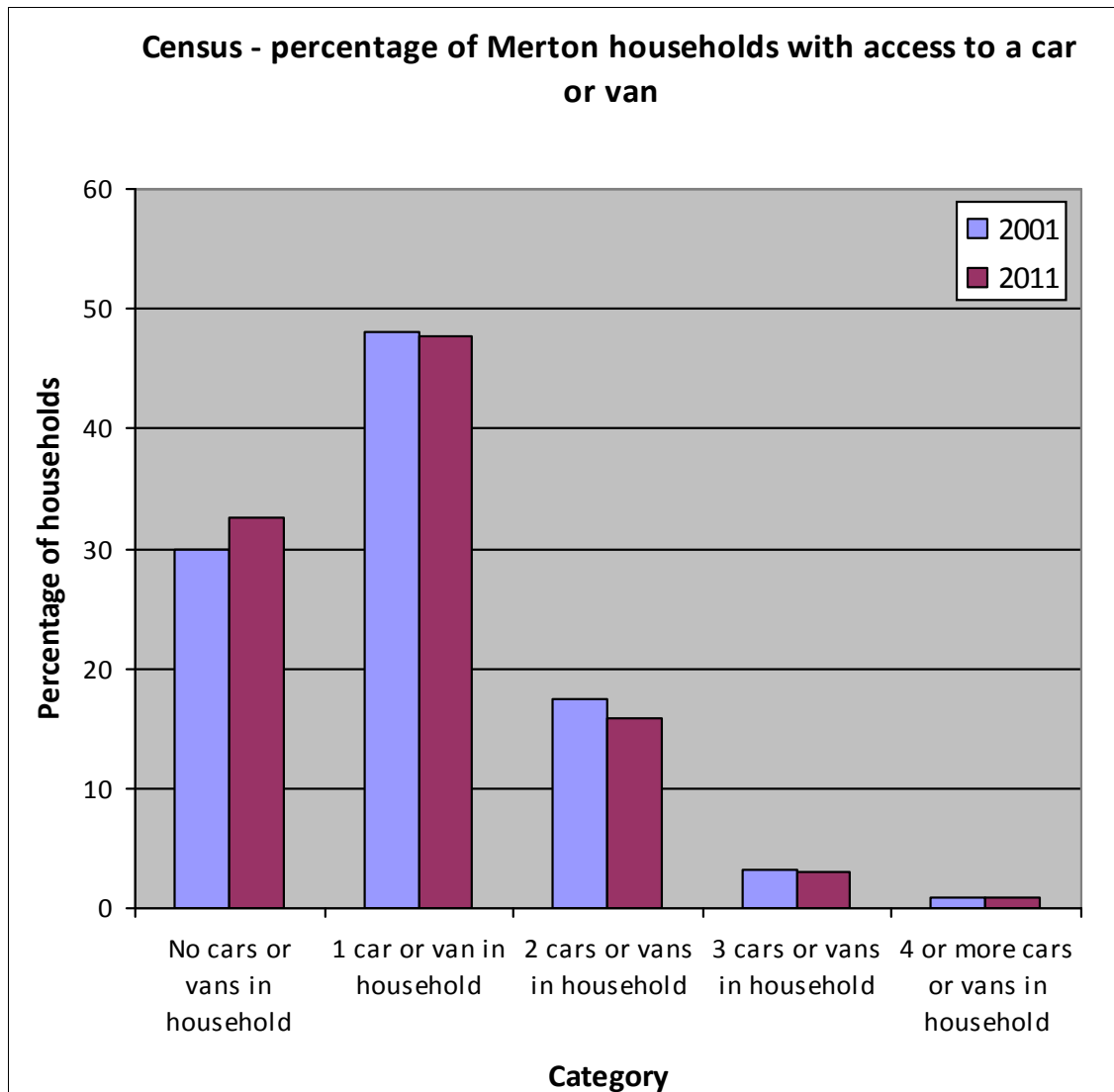


Figure 9: The proportion of households in Merton with access to a car or van.

- 2.5 In the 10 years between 2001 and 2011, there was a 5% rise in working age residents (aged 16 – 24) in Merton using public transport to get to work (from 31% to 36% which equates to an increase of more than 11,000 people). This information complements the reduction in number of households with access to a vehicle, corresponding with a long term trend of more people using public transport instead of private vehicles to commute. In addition, there has also been a fall in the number of people driving to work in cars or vans from 23% to 18% (a reduction of nearly 5,000 people).
- 2.6 These trends are similar to those reported elsewhere in London and the south east of England.
- 2.7 With respect to the method of commute for people in Merton, Figure 10 below illustrates the different methods and trends between 2001 and 2011. Relevant points are summarised as follows:
- Public transport is the most common method of commuting to work having increased from approximately 31% to 36% from 2001 to 2011;

- There has also been an increase in both the percentage and number of people commuting to work using public transport, corresponding to approximately 5% or 12,000 people;
- The number of people travelling to work by bicycle (2%) or on foot (5%) has remained low in both 2001 and 2011, with only the absolute number of people travelling by bicycle having increased by 1,200 being noteworthy;
- There has been a reduction in the proportion and number of people commuting to work using a car or van at 4% and approximately 4,000 people respectively.

2.8 These trends correspond to trends in greater London. It is interesting to note however that a slightly higher proportion of people in Merton use public transport to travel to work than in London as a whole. The proportion of people using public transport to commute to work in London increased from 26% to 33% over the same period, which was a slightly larger increase than experienced in Merton.

2.9 When refining the area of focus to the wards immediately surrounding the Rainbow site, Raynes Park, Dundonald and West Barnes, it is evident that more people commute using public transport than any other method (Figure 11). The proportion of people commuting via public transport was also significantly higher than the remainder of the borough. Each of these three wards had more than 50% of commuters using public transport which was considerably higher than the borough average of 36% (Figure 11). Dundonald is also the densest ward with the easiest access to a variety of public transport methods including the underground, national rail, buses and tram at Wimbledon station. This corresponded with the ward having a substantially higher proportion of residents commuting by public transport.

2.10 Each of these wards had approximately 7,200 people in this age bracket (16 – 74), with Dundonald having slightly more people (7,311) compared to Raynes Park (7,191) and West Barnes (7,188).

Census: method of commute in Merton

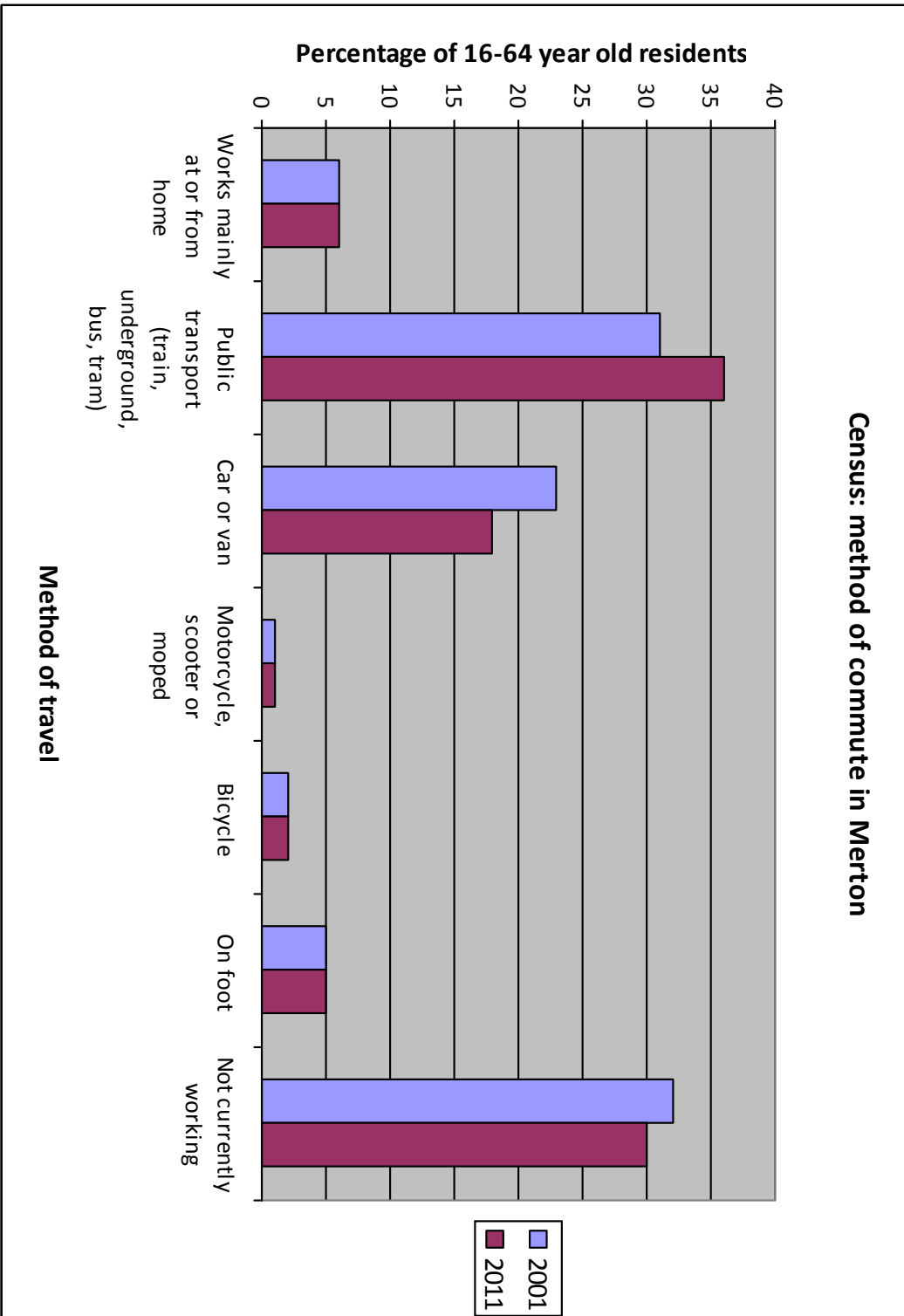


Figure 10: Method of commute for working aged residents in Merton.

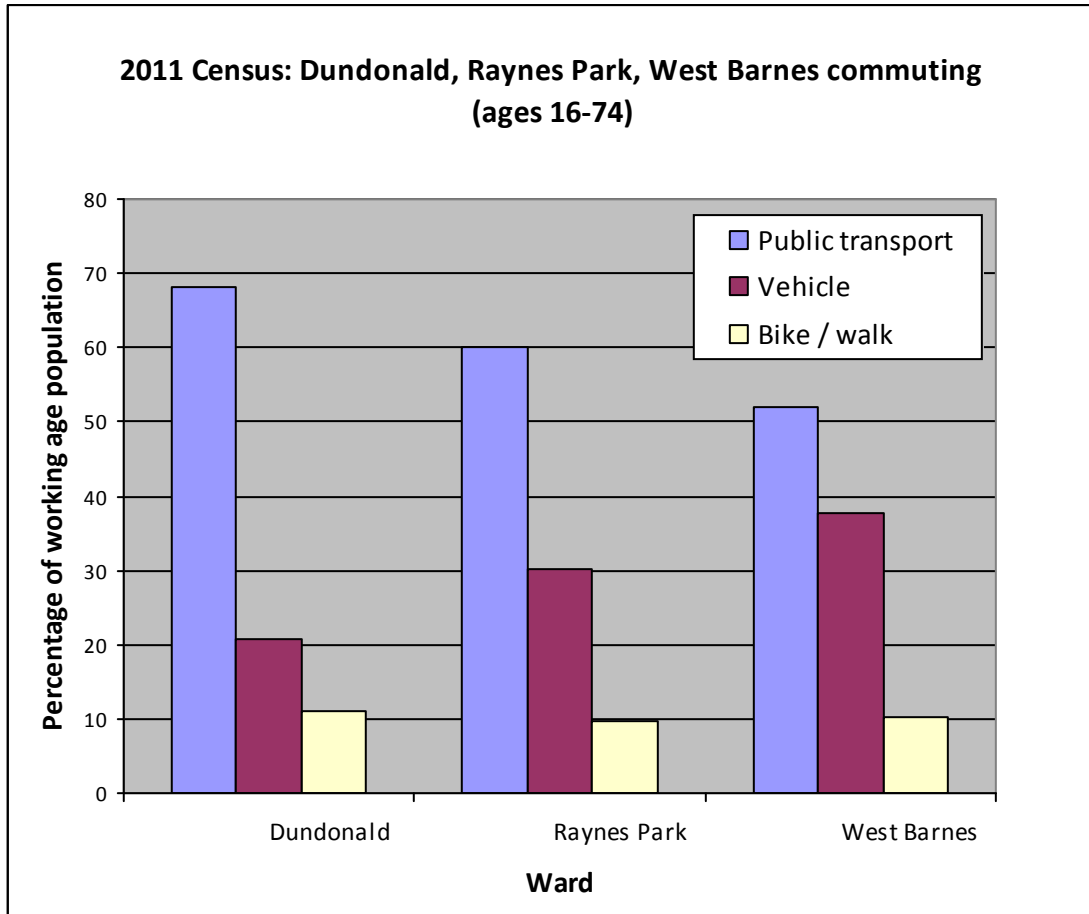


Figure 11: Comparison of the method of commute for people living in wards in the vicinity of the Rainbow site.

Local vehicle movements: Grand Drive – Approach Road

- 2.11 In addition to the pedestrian and traffic movement and parking counts carried out in relation to the southern side of Raynes Park station and the entrance to the Rainbow site, the council also surveyed traffic movements along Grand Drive and Approach Road (an externally prepared report was commissioned by the council).
- 2.12 Comparable data is available for 2008 when survey work was carried out for the waste management proposal that was being pursued at the time for the Rainbow site. It provides a useful comparison of changes on these roads over a five year period.
- 2.13 The figures below illustrate the total number of vehicle movements (north and south) along Grand Drive and Approach Road, within 100m of where these roads meet near the site entrance. These data show the number of all vehicles (with subsequent breakdown of the type of vehicle) travelling past the site entrance.

2.14 With regard to the overall traffic movements along Grand Drive and Approach Road, the following points were evident:

- There was an overall increase in the total number of vehicles on all days from 2008 to 2013 (Figure 12). The increase was a relatively uniform increase in number across the day;
- Figure 13 below illustrates that the increase is almost solely due to an increase in northbound traffic alone. Southbound vehicle numbers have remained almost identical. Similarly, the trend of vehicle numbers through the week is the same between 2008 and 2013;
- The reason for the increase in northbound traffic is not known. However it can be determined that the increase was predominantly in daytime traffic between the hours of 10:00am and 4:00pm (Figure 14). The remainder of the trends are otherwise very similar and were not coupled with a measurable change in southbound traffic numbers.

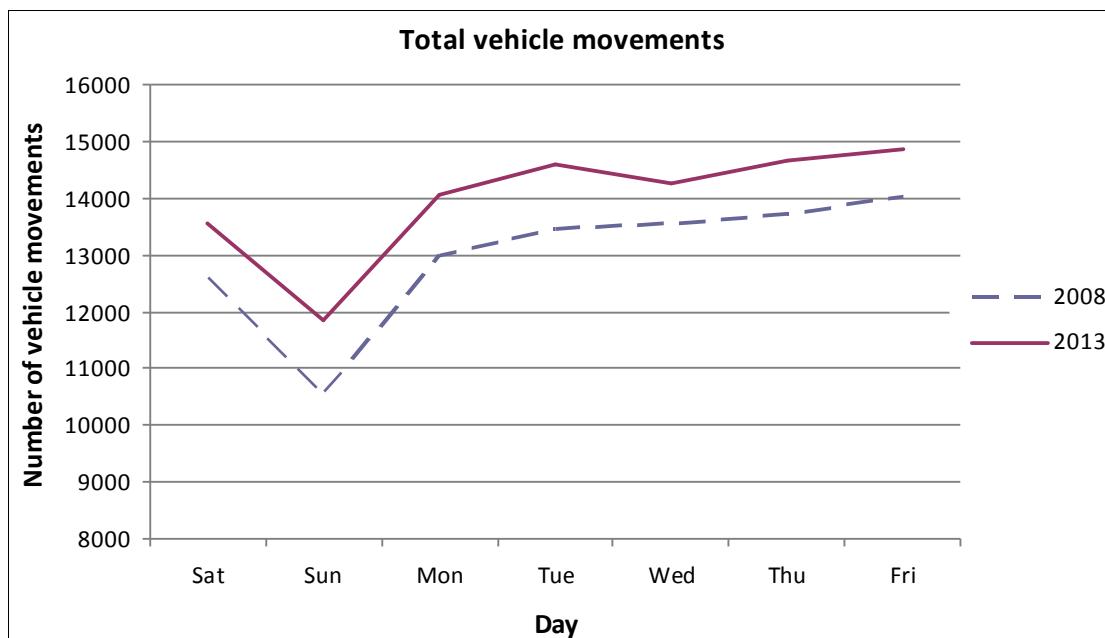


Figure 12: A timeseries depicting the total number of vehicle movements along the road (in both directions) adjacent to the entrance to the Rainbow site over one week during 2008 and 2013.

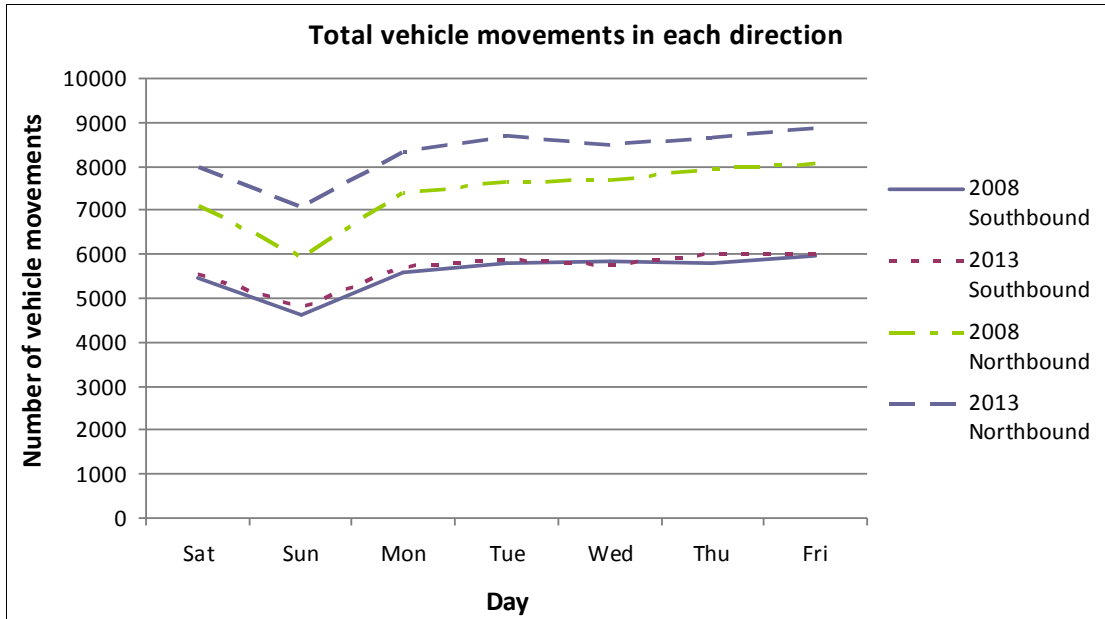


Figure 13: Comparison between the total number of vehicle movements travelling north and south adjacent the site entrance in 2008 and 2013.

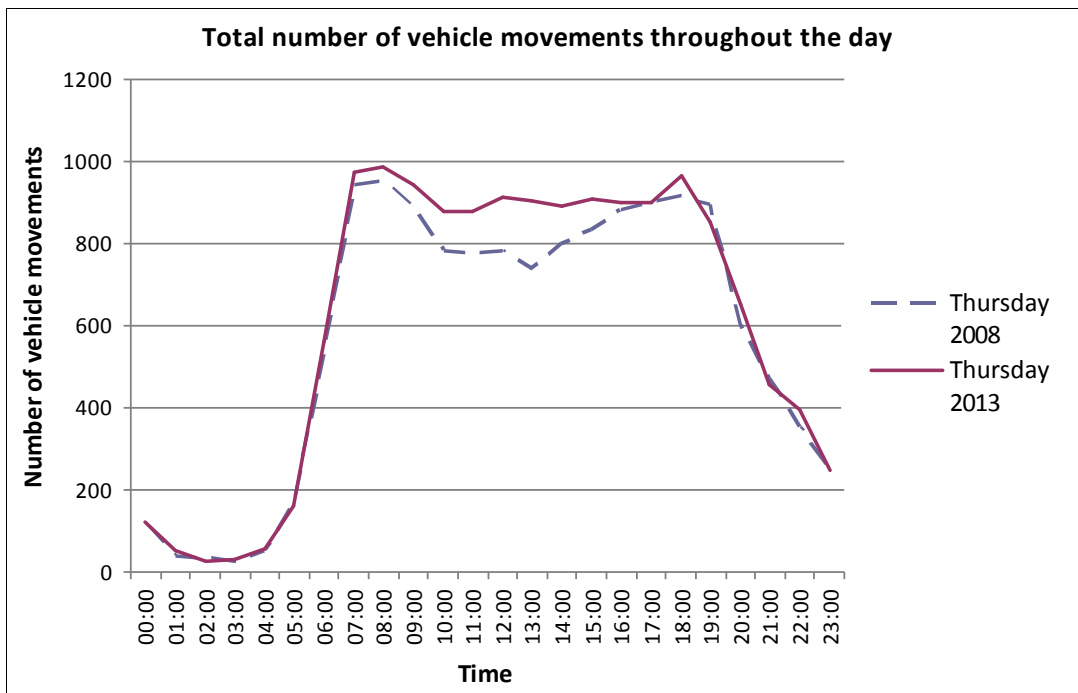


Figure 14: Comparison of the total number of vehicle movements during both Thursday's within the respective surveys. Evident is the increase in daytime traffic between 2008 and 2013.

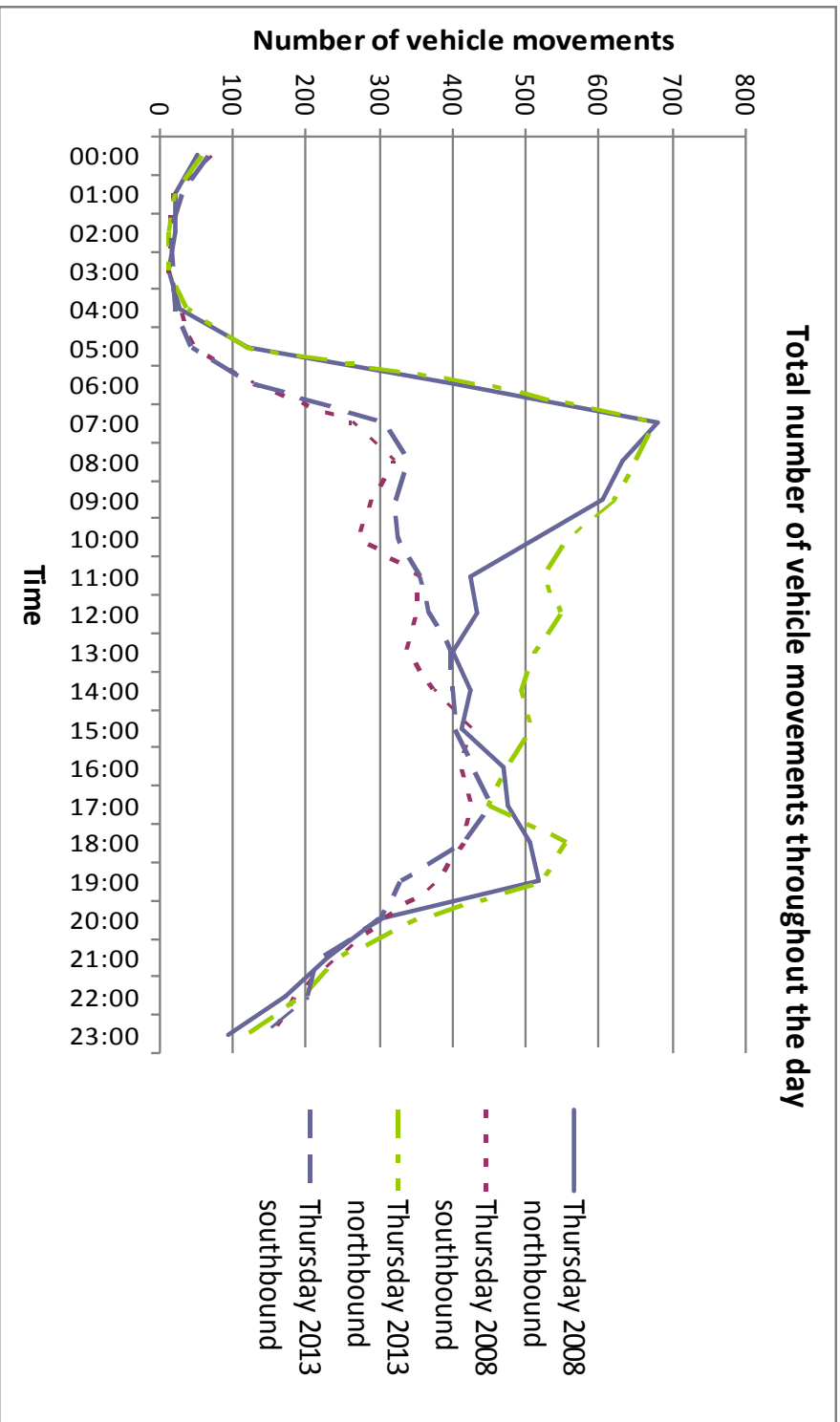


Figure 15: Comparison of the total number of vehicle movements and direction during both Thursday's of the respective surveys. Evident is the increase in northbound traffic from 2008 to 2013.

2.15 Figures 16 and 17 below illustrate that there were no significant differences in the type of vehicle in the five years between 2008 and 2013. There is a small decrease in HGV's and a small increase in vans which corresponds to similar trends from Transport for London, as logistics favour smaller delivery vehicles for urban areas.

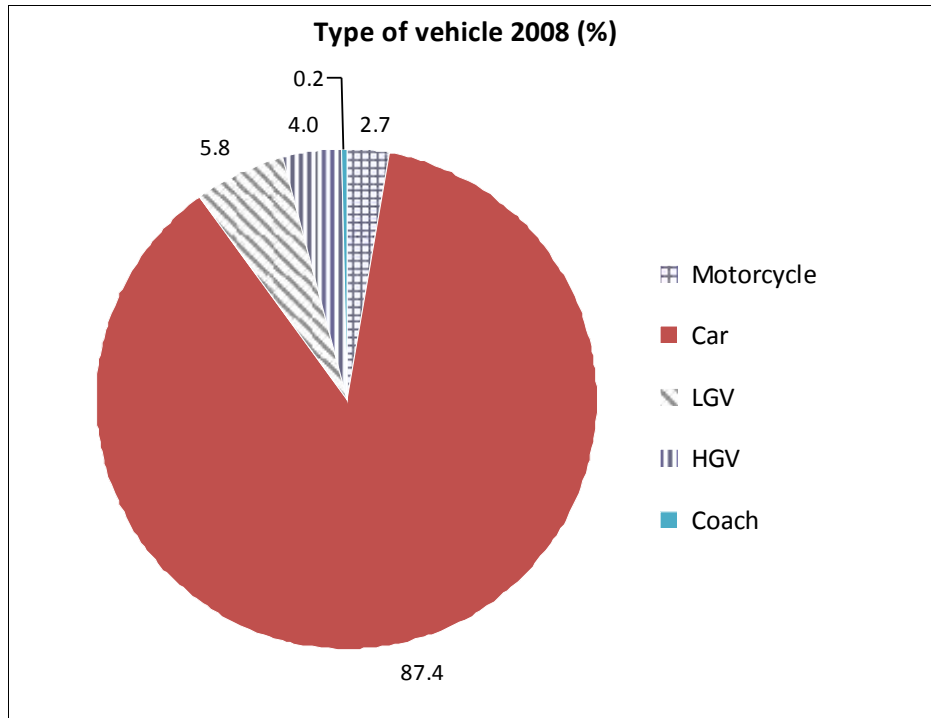


Figure 16: Type of vehicle based on all traffic movements in 2008.

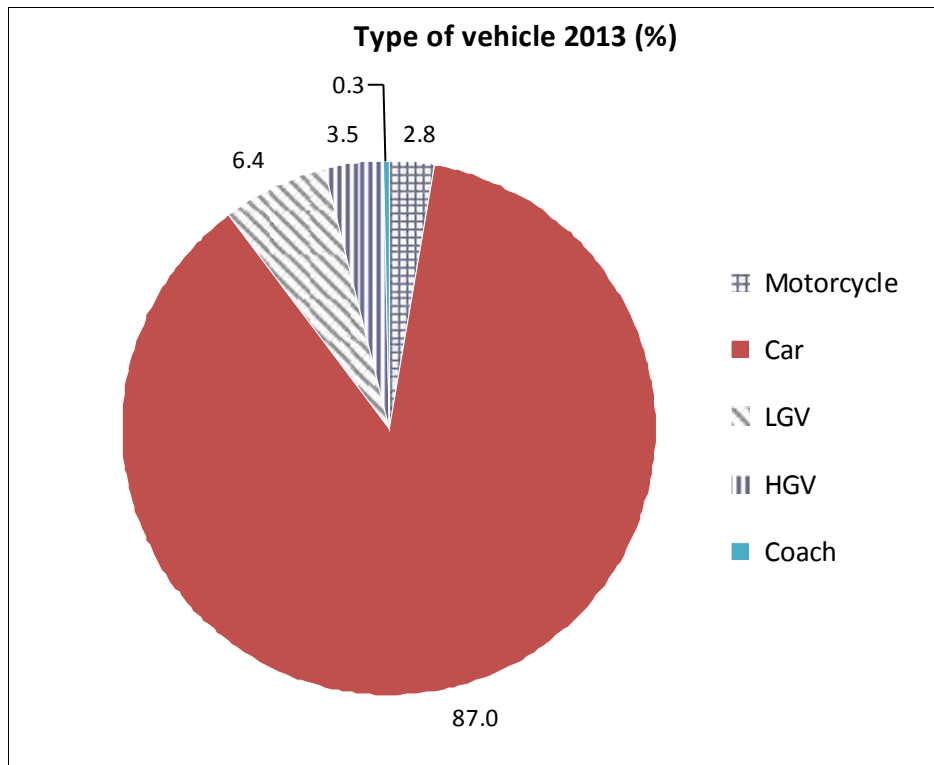


Figure 17: Type of vehicle based on all traffic movements in 2013.

2.16 Some general presumptions can be made from the data presented above and can be applied to future assessment of the site and access from the road:

- That the trend of vehicle numbers through the working week (Monday to Friday) is relatively similar with a high number of vehicle movements and a reduction during the weekend;
- Based on the data, an expected increase in the number of vehicle movements would be a logical assumption, however the only actual change in the last 5 years in vehicle numbers was an increase in northbound traffic during the day. Vehicle movements have also been reducing in London in recent years. It is acknowledged that there may be other reasons for the increase (for example the improvements to the Grand Drive junction). The overall number of northbound movements was substantially larger than the southbound movements therefore this should be factored into the access design for the site;
- That the increase in northbound movements is surprising, but isn't likely to continue at the same rate, this is due to the fact that the overall trend of private vehicles being used for commuting is reducing.

Large vehicle movements (HGV and coach)

2.17 Figure 18 below illustrates that total number of HGV and coach movements into and out of the site during a 12 hour period on a working weekday. There

were a total of 147 HGV and coach movements in and out of the site during this period. There were a total of 596 HGV and coach movements along the road during this time, therefore approximately 25% of all HGV and coach movements along the road accessed the site. The figure illustrates that there is no real pattern and that movements occur throughout the day, with peaks early in the morning (approximately 7:30am) and again in the evening peak (approximately 4:00pm).

2.18 The high number of left turn in movements identified in Figure 5 above corresponds with the high number of northbound traffic movements identified above.

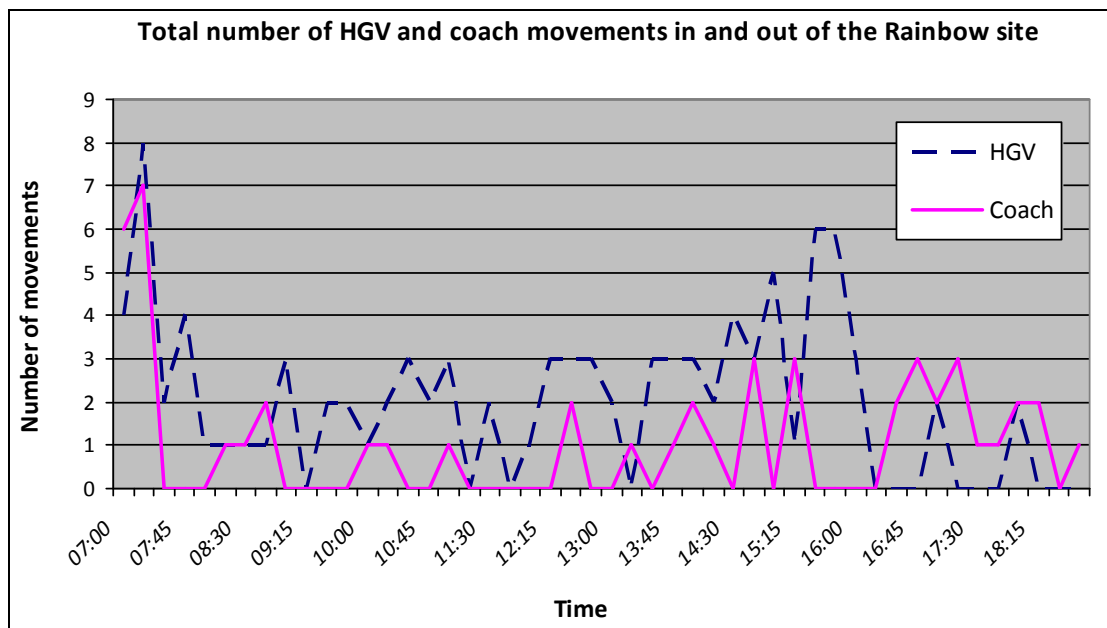


Figure 18: Number of HGV and coach movements into and out of the Rainbow site on a working weekday in May 2013. The total number of HGV movements was 97 and the total number of coach movements was 50 during the 12 hour period.

2.19 As part of the development it is desirable to reduce the number of HGV and coach movements to and from the site. This will improve traffic and pedestrian safety as well as accord with the planning brief to create a high quality business and residential environment. The business aspect will favour small to medium enterprises which are typically less reliant on HGV's.

Comparison to trip generation from other developments

2.20 A comparison to similar developments was undertaken in order to determine the likely trip generation for the type and scale of development envisaged by redevelopment. Ultimately, trip generation from residential properties will be dependent on the public transport accessibility, the anticipated mix of 1, 2

and 3 bedroom units, and any restricted parking will have an important influence on car ownership and trip generation.

- 2.21 The table below outlines the anticipated peak trip generation figures based on observations of other similar developments (based on the TRAVL database):

Vehicles (Residential)

	<i>Land Use Category (Residential (C3))</i>				
	No. of units in the Residential Development	Trip Rate per Unit		Trips	
		Arrivals	Departures	Arrivals	Departures
08:00 – 09:00	250	0.141	0.116	35	29
17:00 – 18:00		0.134	0.144	34	36

Vehicles (Office)

	<i>Land Use Category (Office (B1))</i>				
	Office Floor Space	Trip Rate per100 sq m		Trips	
		Arrivals	Departures	Arrivals	Departures
08:00 – 09:00	3390	0.97	0.01	33	0
17:00 – 18:00		0.00	1.14	0	39

- 2.22 The total vehicle movements, trips in and trips out, expected from both residential and office use between the peak times are 97 and 109 respectively. This results in a total of 206 vehicle movements during the two busiest hours. The existing total number of vehicle movements to the site during 12 hours is 754. The trip generation figures appear to correspond relatively well with the existing situation on the Rainbow site, in that the expected trip generation is broadly similar to the traffic movements measured on site.

- 2.23 The combination of the change in preferred use of the site from light industry to business use will promote the reduction of HGV access to the site. This, coupled with the residential development should result in a similar number of vehicle movements to the site, but with a reduced number of HGV's and coaches through an entrance and access specifically designed to cater for such vehicles, and an increase in pedestrian and cycle movements.

- 2.24 When compared to a recent development in the local area (Waitrose supermarket with upper level residential on Coombe Lane, approximately 200m from the site), the redevelopment of that site resulted in 88 apartments (49% one bed, 42% two bed and 9% three bed units) with 16 dedicated parking spaces for residents plus two car club spaces. This equates to 0.18 parking spaces per unit. The London Plan requires less than one space per unit for sites in areas with good access to public transport.
- 2.25 The site currently has a PTAL rating of 5 at the entrance to the site from Grand Drive. This is evidenced by the proximity to Raynes Park station and the number of bus routes serving the immediately surrounding area. This is classified as very good access to public transport by Transport for London.
- 2.26 This comparison of similar developments accords with the trends of car ownership outlined by the census analysis above (Figures 9 and 10) which illustrated a reduction in the use of private vehicles and an increase in the use of public transport for commuting.

Conclusions

- 3.1 The purpose of this report is to inform transport matters relating to Merton's supplementary planning document for the Rainbow Industrial Estate.
- 3.2 The report has used the following information in order to assess the potential traffic related impacts on the site:
- Carried out an objective traffic, cycle and pedestrian count of movements to and from the site, around the site entrance and along Grand Drive and Approach Road in 2013. These data were compared to similar data obtained in 2008;
 - Reviewed wider transport and travel trends, including results from Census 2011 and Transport for London research;
 - Carried out a comparison with other similar site proposals in Merton and in London;
 - Examined the transport and parking issues relating to the site proposals, including potential new access points to the site; and
 - Compared the existing situation and future trends with the new proposals.
- 3.3 The following points represent a summary of the key findings in the report:
- The site has a very good level of access to public transport (PTAL 5) and road, being close to the A3;
 - The site has a single access point to Grand Drive which is similar to other local areas such as Carters Estate, Somerset Ave and the Apostles;
 - More than 410 car movements are associated with the site during a working weekday; 63% entering and exiting the site with 37% parking at the entrance.
 - The current use on the site also has a relatively high proportion of HGV and coach access (143 HGV and coach movements during a working weekday), and a relatively low proportion of pedestrian and bicycle access;
 - Within the last 5 years there has only been an increase in daytime northbound traffic movements adjacent the site, other movements have remained similar;
 - The area immediately inside the entrance is used for unauthorised parking of approximately 80 parking incidents a day;
 - All parking will be provided on-site in line with the London Plan standards; parking management plan and a travel plan will be submitted and assessed with any development proposals;

- Household access to a vehicle is decreasing in Merton and London with approximately one third of all households not having access to a private vehicle;
- The use of a vehicle for commuting is decreasing whereas the use of public transport for commuting is increasing in Merton and London;
- The surrounding wards have a very high proportion of use of public transport for commuting compared to the remainder of Merton and London;
- Redevelopment is anticipated to result in a reduction in car movements, a reduction of HGV and coach movements and an increase in pedestrian and bicycle movements.

3.4 The report has therefore provided a comprehensive assessment of existing traffic impacts associated with the site and compared the results to trends in Merton, London and other similar developments. The report provides guidance for a future transport assessment to be prepared and submitted as part of a planning application to redevelop the site.