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# **WINCHESTER PROPOSED LEISURE CENTRE TRANSPORT REPORT**

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### Revision History

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## 1. INTRODUCTION

Ramboll has been appointed by Winchester City Council (WCC) to provide a preliminary assessment of the transport related issues associated with two site options for the provision of a replacement leisure centre for Winchester. The proposal is for a state-of-the-art leisure centre containing a multitude of specialist sports facilities for users from Winchester and the surrounding area.

This report provides a preliminary assessment of the transport related issues relating to the two site options, covering the transport networks serving Winchester, including public transport, highway and parking, and pedestrian and cycle networks. Respecting the preliminary stage of the proposals, the conclusions of this report are subject to further detail and assessment, in parallel with the development planning process.

As specified by WCC, the two sites under consideration in this report are within North Walls, and at Bar End.

## 2. BACKGROUND

Winchester is located in Hampshire with the major highway network consisting of the M3 motorway; the A34 leading to the A303, and the A31 linking Winchester to Guildford. There are numerous local 'B' classified roads leading to closer destinations as shown in Figure 1.



**Figure 1 Sub-Regional Location Plan**

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The City of Winchester is a busy local commercial centre consisting of a relatively large business and retail area. The City Centre has many services for both local residents and tourists. These consist of major national retail chains, local independent traders, restaurants, services and tourist facilities.

The highway network within Winchester City Centre serves a wide catchment area of local residents, visitors and tourists. There is a high demand for the road space and limited opportunity for increasing the capacity of the highway network (should this be desirable).

There are numerous short stay car parks provided within close proximity of the City Centre and Park and Ride sites located on the outskirts of Winchester linking the City Centre to the surrounding highway network, at St Catherine's, South Winchester and Barfield.

Bus routes serve the City and link to surrounding towns and villages, on various level of frequency. Winchester is served by mainline rail services providing fast efficient access to a number of national locations, including direct trains to London, Birmingham, Manchester, Edinburgh, Southampton, Bournemouth and Weymouth.

The existing River Park Leisure Centre is located adjacent to the city centre, and consists of a number of sports and leisure facilities. There is also a pay and display car park provided for users of the site. This car park consists of approximately 176 spaces, used by leisure centre customers, visitors to the recreation ground and by some occasional visitors to the City Centre although recent changes in parking charges have sought to deter this.

In addition there are a further 165 spaces at St Peters car park which is used as overflow car parking when the leisure centre car park is full. There are also 29 spaces at Hillier Way car park to the north of the leisure centre.

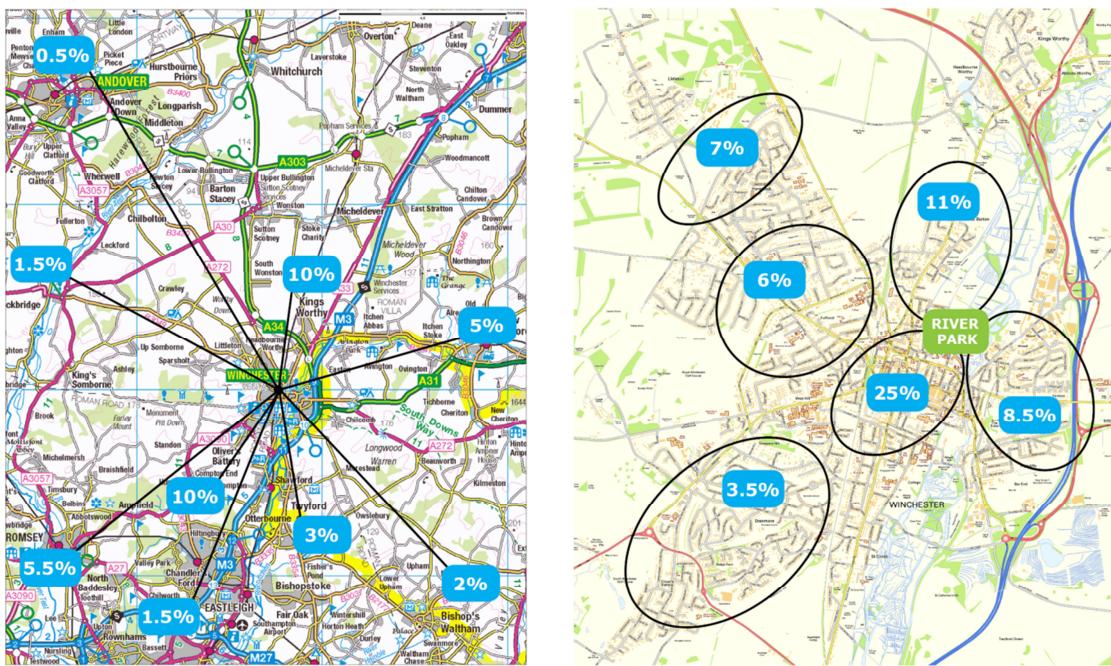
### **3. EXISTING USER DETAILS**

The River Park Leisure Centre currently attracts around 530,000 visitors per annum, of which approximately 3,000 are members. The catchment area for the existing site users is shown below in Figure 2.

A customer survey was carried out at the leisure centre in February 2009, and a further survey was completed in 2014.

#### **3.1 2009 Customer Survey**

In 2009, the following travel related data was collected. Around 60% of customers live in and around Winchester, with a travelling distance of between 400m to 4.0km to access the leisure centre. The remaining 40% travelled up to 29km to use River Park Leisure Centre as shown by Figure 2.

**Figure 2 River Park Leisure Centre User Locations**

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Access to the leisure centre is via a number of travel modes. The most popular is private car at about 65%, with walking at around 21%; and cycling and public transport coming in at 6% to 8% each.

The peak days for using the leisure centre are in the early part of the week, with Fridays having the lowest weekday occupancy levels. The peak hours of access for the leisure centre are mainly during the afternoon and early evening.

The peak period for leisure centre use is between the hours of 12noon and 1600hrs with approximately 35% of visitors attending. The number of visitors during the morning travel peak of about 8%, with the afternoon travel peak being at about 22%.

In addition, the 2009 survey results indicate that 55% of visitors arriving by car find a parking space easily, whereas 24% have significant difficulty, including some that aren't able to park at all in the car park.

### **3.2 2014 Customer Survey**

Based on 2013 data, around 66% of customers live in and around Winchester (up to 4km). As expected, access to the leisure centre continued to be via a mix of travel modes. In 2014 the most popular mode continues to be the private car at about 62%, with walking at around 29%; and cycling and public transport coming in at 3% each.

The 2014 survey data indicates the peak days for using the leisure centre continue to be in the early part of the week, although Fridays appear to have picked up since 2009. The peak hours of access for the leisure centre are mainly during the afternoon and early evening.

The peak period for leisure centre use recorded in 2014 maintains a similar pattern of use to 2009, as in between the hours of 12noon and 1600hrs, with fewer visitors during the morning travel peak and greater visitor numbers during the afternoon travel peak.

In addition data was collected about user parking behaviour. Of those who drove to the leisure centre, 94% parked at the River Park Leisure Centre.

## 4. COMMITTED DEVELOPMENT

Within Winchester there are a number of committed residential developments. The largest of these is the Barton Farm residential development consisting of approximately 2,000 dwellings located to the north of the City Centre. This development is located approximately 2km from the existing River Park Leisure Centre.

Additional smaller developments within Winchester include:

- Abbotts Walk – This development consists of approximately 90 dwellings of various sizes between two and five bedrooms.
- Woolverston development – This development is located on Bereweke Road to the north-west of the City Centre, and consists of 11 development plots.
- Hyde Park Corner – This development is around 250m from the City Centre and consists of 14 dwellings.
- Florence Rise – This site is on the B3040 Romsey Road to the west of the City Centre and consists of 14 dwellings.

## 5. NORTH WALLS DEVELOPMENT SITE PROPOSAL

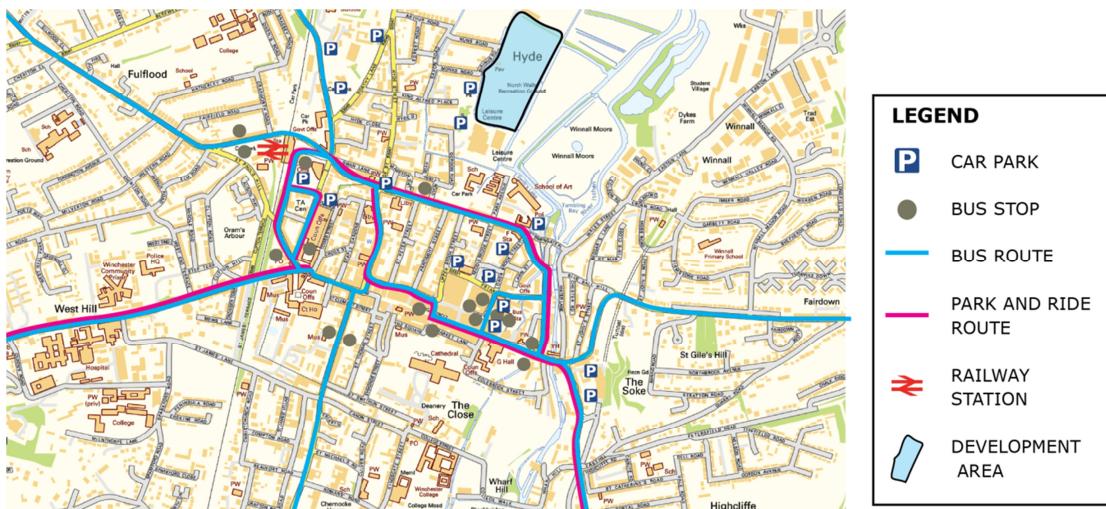
### 5.1 General Site Details

The site is located close to the City Centre with the rail station located approximately 750m walk or 1km by car/bike from the River Park site.

The area surrounding the site is mainly residential in nature with several local amenities sites such as primary school, child day care centre, local businesses, art gallery and a public house.

The site is in close proximity to the City Centre. The surrounding area is well served by footways on both sides of the road. There is direct access to the City Centre which provides access to the standard high street services.

The local highways surrounding the site are subject to a mix of 20mph to 30mph speed limits. Due to on-street parking on both sides of the carriageway, vehicle speeds on these roads are unlikely to achieve these speed limits.



**Figure 3 River Park – Car Park and Bus Route Provision**

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Local highways surrounding the site include sections of one way running, signal controlled intersections, with pedestrian crossing facilities.

## 5.2 Pedestrian Facilities

Within the vicinity of the site and local area there are numerous pedestrian facilities, these include pedestrian footways along both sides of the carriageway; localised pedestrian build out areas (with tactile paving and dropped kerbs near to the local primary school); and guard railings are also present in the vicinity of locations where there are high levels of pedestrian activity adjacent to the carriageway. Street lighting is provided throughout the surrounding areas.

## 5.3 Cyclist Facilities

There are dedicated cycle ways and bicycle facilities at signalised junctions within Winchester and the vicinity of the site. These consist of off street cycle paths and associated infrastructure. There are bicycle hire centres within the City Centre. The site also benefits from local access to the National Byway, 'South Downs Way' and National Cycle Route 23.

## 5.4 Car Parking

Car parking provision on the streets surrounding the site are controlled by a combination of double yellow lines; single yellow lines; and residents parking bays. These locations are therefore unlikely to be available for use by users of the site. There are nearby public, pay and display car parks. These include the River Park Leisure Centre car park, St Peter's in Gordon Road and Hillier Way. These are all pay and display car parks which are charged by the hour except for Hillier Way which is limited to 3 hours waiting but not charged.

Appendix B and Appendix C of this report presents outline calculations, based on Hampshire County Council parking standards for the existing and proposed facilities based at both a standard accessibility and a high accessibility area. Although HCC parking standards have now officially been withdrawn, they are still used by WCC as a guide for planning purposes.

Should the leisure centre continue to be served by the River Park car park, further management measures could be deployed to help ensure that all of the available space is available for Leisure Centre users. However recognition would need to be made of public parking being available for shared use by the city, and the benefit of encouraging joined-up trips, e.g. work in the city centre then go to the gym after-work, but only needing to park once to do both activities. Parking will need careful consideration as part of any future transport assessment.

### **5.5 Bus Services**

The site benefits from good public transport links including bus routes 1, 4, and the Park and Ride buses, which all pass within 300m of the development site. Additionally Routes 2, 3, 5, 'The Spring', 7, 46, 66 and 86 pass within 500m of the site.

The Park and Ride car parks are located approximately 2.1km from the site to the south of the City Centre. A Park and Ride bus stop is located on North Walls adjacent to St Peters Car Park which is a five minute walk to the leisure centre. Park and Ride bus services run every 10 minutes during the morning and afternoon peak hours and 15 minutes throughout the rest of the day with the hours of operation being 0600 to 2025.

### **5.6 Potential Users**

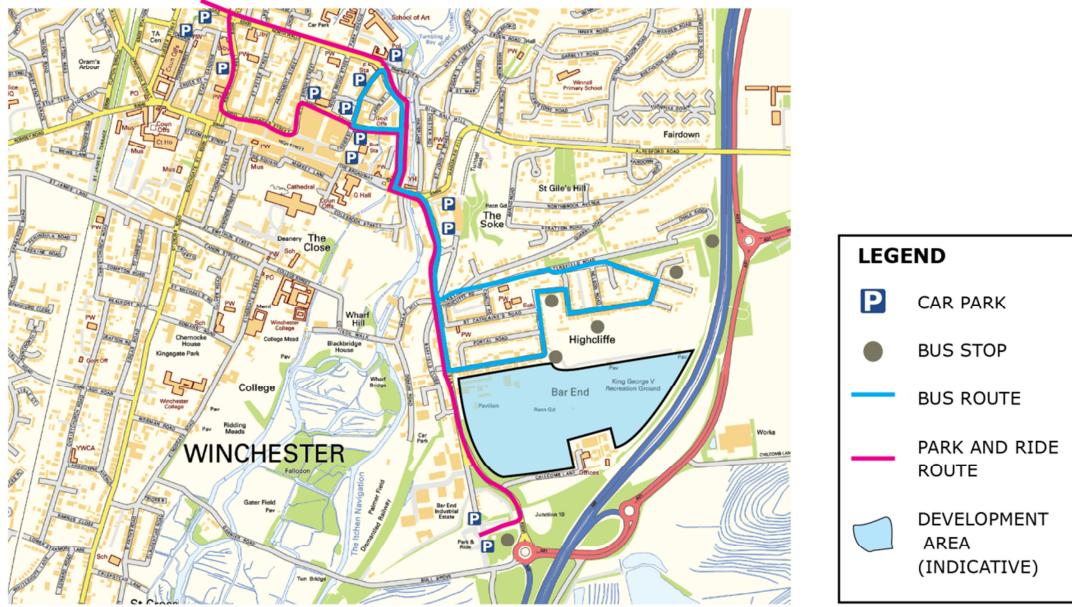
The user catchment areas for the site are anticipated to be similar to those of the existing facility; therefore there will be a negligible change in distance of journey length for users at the site.

The accessibility of the leisure centre from the Barton Farm residential development is likely to generate new members. The Barton Farm site, in relation to the proposed leisure centre site, will be well connected and served through the existing facilities.

Subject to site selection, a full transport assessment would be required in order to assess the impacts and determine what access or highway mitigation improvements might be necessary.

## **6. BAR END DEVELOPMENT SITE PROPOSAL**

The site at Bar End is located to the south of Winchester City Centre. The site is partially occupied by the Winchester Sports Stadium which is controlled by University of Winchester. The potential site also includes King George V and The Garrison Ground playing fields. The site is a large flat-level area partially used by local sports clubs as sports pitches. King George V playing field has 50 car parking spaces for users and the sports stadium has a small car park for disabled users. The site is adjacent to the existing Barfield Park and Ride bus service.



**Figure 4 Bar End - Car Park and Bus Route Provision**

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## 6.1 General Site Details

The site is located approximately 1.7km from the City Centre. There are footway and cycleway facilities linking the site to nearby residential areas and the wider network areas. Winchester national rail station is located approximately 2.1km away from the site.

The area surrounding the site is very residential in nature with local amenities including a primary school (All Saints Church of England), convenience store, local businesses, restaurants and a public house in the vicinity.

## 6.2 Pedestrian Facilities

Within the vicinity of the site are numerous pedestrian facilities; these include pedestrian footways along both sides of the carriageway (lit in the residential areas), with dropped kerbs at key crossing locations. There are signalised pedestrian crossing facilities located on Bar End Road to the west of the site.

## 6.3 Cyclist Facilities

The site is close to designated cycle routes which pass through the area, including National Cycle Route 23. These consist of direct links to the nearby village of Twyford and other villages via a series of on-road and off-road cycle-friendly routes.

#### **6.4 Car Parking**

There are parking restrictions applied throughout residential areas surrounding the site. These consist of double yellow lines, single yellow lines, resident permit holder bays and dedicated disabled user bays

The Barfield Park and Ride site is located a short walk from the Garrison Ground. There are informal crossing points for pedestrians across Bar End Road but pedestrians do experience difficulties crossing the road in this vicinity due to the traffic flows. Although this is conveniently located for the users of the site, the primary function of this car park is for Park and Ride users. It is available for use in the evenings for users of the Sports Stadium. The car park is owned by Hampshire County Council and leased to the City Council to operate as a Park and Ride car park. It is very well used and is full to capacity during weekdays.

St Catherine's Park and Ride car park is also located nearby. This has some spare capacity at present but the City Council's parking strategy includes an objective to increase use at this site. It is also considered to be too far away from a nominal site entrance off Bar End Road to be an attractive or practical parking option.

Appendix B and Appendix C of this report presents outline calculations based on Hampshire County Council parking standards for the existing and proposed facilities based at both a standard accessibility and a high accessibility area. As a standard accessibility, should the proposed facilities be based at Bar End, 363 spaces would be required. Although HCC parking standards have now been officially withdrawn, they are still used by WCC as a guide for planning purposes.

#### **6.5 Bus Services**

Bus route 4 passes close to the site, which runs every 60 minutes to the City Centre from 0730hrs to 1730hrs daily. The bus stop is approximately 150m from the proposed site access onto Milland Road.

The Barfield Park and Ride bus service is located directly across Bar End Road from the site, approximately 500m. The Park and Ride bus services run every 10 minutes during the morning and afternoon peak hours, and 15 minutes throughout the rest of the day with the hours of operation being 0600hrs to 2025hrs.

#### **6.6 Potential Users**

On the basis that the user catchment areas for the site are similar to those of the existing facility; there will be an increase in the distances travelled to access this site. Due to the increase in distance it is likely that customer travel modes will alter. It is anticipated that the levels of pedestrian users, and possibly cyclists and public transport patrons will reduce.

This site may be more attractive to some residential areas which currently do not use the existing facility; however, the location is unlikely to be convenient for the newer residential developments such as Barton Farm. It is also unlikely to be as attractive to as many centrally based workers who currently use the leisure centre at lunchtimes or evenings and access it on foot.

Subject to site selection, a full transport assessment would be required in order to assess the impacts and determine what access or highway mitigation improvements might be necessary.

## 7. COMPARISON OF OPTIONS

Based on the information obtained supplemented by a walkover of both sites, a comparison of the baseline for the two sites is summarised by Tables 1 to 3 below.

**Table 1 Comparison of Key Issues**

Measurable	North Walls Site	Bar End Site
Existing use	The site includes the existing leisure centre, an indoor bowls club, a skate park and various outdoor recreational facilities and space.	This site is currently largely used for sports pitches with a section occupied by the Winchester University Sports Department
Distance to the City Centre	950m	1,300m
Distance to the railway station	750m	2,100m
Bicycle facilities	Indirect access to the South Downs Way Indirect access to the National Cycle network	Semi direct access to the South Downs Way Semi direct access to the National Cycle network
Pedestrian footpaths in the vicinity	Level, good condition footpaths in the vicinity of the development site Dropped kerb facilities located in the proximity of the desired crossing points Protection railings in areas of high pedestrian activity Built-out pedestrian crossing facilities Tactile paving supplied as required	Level good condition footpaths in the vicinity of the development site. Dropped kerb facilities located in the proximity of the desired crossing points.
Street lighting levels	Street lighting provided in the vicinity of the proposed development	Street lighting provided in the vicinity of the proposed development
Nearby public car parking provisions	Existing pay and display car park located at St Peter's consisting of approximately 165 spaces	Barfield Park and Ride car park consisting of approximately 194 spaces
On-street parking availability	Resident parking permits in the area surrounding the proposed development	Resident parking permits in the area surrounding the proposed development
Ease of access	Accessed via the existing road network around Winchester City Centre. The existing sports centre location is indicated by directional signage throughout the City Centre	Access could be off Bar End Road or via the existing residential roads
Disabled access issues	None	None
Likelihood for car park abuse by non-users	Slight	Slight
Car parking Requirements (based WCC benchmark)	258 spaces (based on high accessibility – see Appendix C)	363 spaces (based on standard accessibility – see Appendix C)
Distance to Police Station	0.85km	1.8km

Measurable	North Walls Site	Bar End Site
Distance to Fire Service	0.4km	1.4km
Distance to Ambulance	1.9km	2.7km

**Table 2 Proximity to Residential Communities (including Committed)**

Local Residential Areas	% of current users	To River Park Site (km)	To Bar End Site (km)
Central Winchester	25	0.5	1.3
Highcliffe	4	2.2	0.1
Winnall	5	1.9	2.6
Hyde/Abbots Barton	11	0.5	2.9
Fulfold/Weeke	6	1.7	3.5
Teg Down/Harestock	7	2.4	4.2
Stanmore	4	4.0	3.3
Alresford	5	13.0	11.5
Kingsworth	10	5.8	7.2
Badger Farm	10	5.5	3.0
Twyford	3	6.0	4.3
Chandlers Ford	2	13.0	10.5
Romsey	6	19.0	18.8
Stockbridge	2	16.0	16.0
Andover	1	29.0	29.0
Bishops Waltham	2	19.0	15.0
Committed Development	Units	To North Walls Site (km)	To Bar End Site (km)
Barton Farm	2000	2.0	3.7
Abbotts Wood	90	0.6	3.6
Woolveston	11	1.7	3.2
Hyde Park Corner	14	1.5	3.0
Florence Rise	14	2.0	4.6

**Table 3 Bus Services**

	<b>North Walls Site</b>	<b>Bar End Site</b>
<b>Bus Services Serving the Site</b>	2,3, 5, The Spring, 7, 46, 66, 86 Park and Ride	4 Park and Ride
<b>Distance to Bus Stops (m)</b>	500	150
<b>Frequency of Buses</b>	Up to 27 per hour plus park and ride	1 per hour plus park and ride

### 7.1 Comparison of 2009 and 2014 Customer Survey Data

Comparing the two survey data sets the following notes are made:

- The 2014 data suggests a stronger local catchment; 66% in 2014 vs 60% in 2009 (based on a 4km distance threshold). Whilst the actual difference may not be huge, it does suggest a gradual change towards a greater proportion of visitors coming from the local area within Winchester.
- In terms of mode of access, car use continues to be most preferred at around 60-65% for both data sets. Of interest is the growth in walking (up from about 20% to 30%), at the expense of bus and cycle modes.
- Busy days are generally consistent between the two data sets, although Friday appears perhaps busier in 2014. Afternoons remain more popular than mornings.

In summary the key changes recorded between 2009 and 2014 are an increasing proportion of local trips, with a greater propensity to walk to the leisure centre, and a reduction in the proportion of bus and cycle trips (albeit small actual numbers in both data sets).

The key issue with respect to transport impact will be changes in travel mode choice. This is especially relevant to the Bar End site; whereas because the North Walls site hosts the existing leisure centre the scale of change in mode choice is expected to be negligible.

In response to this, WCC completed some supplementary analysis based on the 2014 survey data, to help further understand the potential change in travel mode due to the change in leisure centre location; from North Walls to Bar End. The analysis is based on the same number of users originating from the same origin points. This means the existing River Park origin points are effectively re-routed to Bar End. Clearly there will be issues relating to lost customers and new customers due to any relocation, but this is outside the scope of this preliminary consideration of transport issues. Table 4 sets out the estimated change in trip lengths (note figures are rounded).

**Table 4 Estimated Change in Trip Lengths**

	Survey Results for River Park (Existing)		Same Origin Points Applied to Bar End		Difference from River Park (existing)	
	%	Number	%	Number	%	Number
Up to 500m	15	205	3	35	-12	-170
500m to 1km	14	195	5	65	-9	-130
1 to 2.5km	28	385	38	525	10	140
2.5 to 5km	17	245	25	350	8	105
5 to 10km	12	170	15	200	3	30
10 to 25km	11	145	11	155	0	10
25km +	3	35	4	50	1	15

Based on these assumptions, as expected

Table 3 indicates that the number of short distance trips (up to 1km) drops. This is because these existing very local origin points, are further away from the Bar End site. The number of middle distance trips (1 to 5km) sees an increase, and these trips form the greatest proportion of the total trips. The number of longer trips (5km and above) see little change.

As a further step in the analysis, WCC assumed that distance determines mode choice, and based on the distribution of mode choice by distance data collected at River Park, estimated what the travel mode split for Bar End might be. Table 5 presents this estimation (note figures are rounded).

**Table 5 Estimated Change in Mode Split**

	Calculated Average Incoming Trips to Bar End				Calculated Difference in Average for Incoming Trips to Bar End			
	Car	Walk	Cycle	PT	Car	Walk	Cycle	PT
Up to 500m	3	30	1	0	-15	-150	-7	0
500m to 1km	25	35	4	0	-55	-70	-8	0
1 to 2.5km	365	115	20	30	95	30	6	8
2.5 to 5km	275	35	8	30	85	10	2	9
5 to 10km	190	5	1	7	30	1	0	1
10 to 25km	140	4	1	8	8	0	0	0
25km +	50	0	0	0	15	0	0	0

Whilst clearly indicative, based on the above assumptions and subject to further detail and assessment, this preliminary estimation suggests that compared to the site at River Park, a leisure centre at Bar End could result in greater numbers of car trips, less walking trips, with minimal change for bus and cycle trips. This outcome is plausible based on the same customer origin points being applied to Bar End.

However, the outcome is likely to be more mixed, due to changes in customer profile resulting from the change in leisure centre location. This will be subject to future assessment.

## 8. DISCUSSION

### 8.1 North Walls Recreation Ground

Current planning legislation is captured within the National Planning Policy Framework (NPPF) but specific planning guidance is still referred back to the previous Planning Policy Guidance (PPG) documents. Planning Policy Guidance 13 (PPG13) sets out the government's policies regarding transport and development planning. The guidance on parking in PPG13 is generally aimed at non-residential developments and notes that, in the case of trip generators (destinations such as shops, workplaces and leisure facilities) the level of parking provision can strongly influence the travel choice of users accessing these destinations. NPPF identifies that local authorities should assess what the most appropriate parking standards should be for any given area, as part of their development and transport strategies. Maximum parking standards are specified in PPG13 for a number of non-residential, non-employment uses above a certain development size threshold. PPG13 allows local authorities to adopt more rigorous standards where appropriate.

WCC current apply Hampshire County Council parking standards as a benchmark. These parking standards identify that there is an aspiration to reduce parking availability by varying amounts dependent upon factors such as public transport accessibility, the amount of existing public parking spaces nearby, environmental effects, the local economy and pedestrian and cycle access. For new developments the scope for reducing the maximum parking limit depends on the type of land use with the highest percentage reduction for parking at the workplace, since this offers the greatest scope for tackling regular, peak-hour traffic congestion. With regard to North Walls defined as a "leisure" land use and with the location being classed as "highly accessible" then the HCC guidance suggests a reduction in parking levels by between 75% and 50%.

By locating the new leisure centre within North Walls, there is likely to be little change in terms of the way customers travel to the site, compared to the existing facility. The expansion of facilities will result in a greater demand in travel in Winchester, both in terms of private car use and other means, however, travel patterns are likely to be similar.

Accessibility to the existing centre is very good with frequent bus services, the rail station within walking distance, and good facilities for pedestrians and cyclists. However car usage is relatively high for a city centre location reflecting the wide catchment range of Winchester and its environs. This pattern is unlikely to change if the leisure centre is located within North Walls, unless attention is given (perhaps through a travel plan and supporting measures) in recognition of the close proximity of the city centre presenting ample opportunity for greater use of the Leisure Centre as part of other activities within the City; i.e. combined within a work day or as part of a shopping/leisure trip, thereby reducing the need to drive to the site.

Peak visitor times to the leisure centre do not coincide with the morning peak periods on the travel networks, but do coincide with the afternoon peak, albeit both being more spread in profile. Therefore the impact on the existing network is unlikely to cause additional congestion in the morning, but may cause localized impact in the afternoon. The immediate impact is likely to be at the junction of North Walls and Hyde Abbey Road which is signal controlled. Subject to assessment, consideration may be given to amending/upgrading the phasing of these signals. Liaison with Hampshire County Council will determine if such modifications are required and confirm the operational capacity of this junction.

Circulation of vehicular traffic may be improved by creating a second access point linking to Park Avenue (this could be on a one way basis); however, this will need to be carefully considered in terms of its impact on existing facilities including a children's play area, St Bede School and the Winchester School of Art. Other than creating a second access point from Park Avenue (if at all), there are no other viable options to create new vehicular access points, without significant mitigation measures.

If this site was chosen for the replacement facility, costs required to improve local transport infrastructure such as the pedestrian and cycle network, and the existing signalised junction are likely to be comparatively low.

## **8.2 Bar End**

The Bar End site is located on the south-eastern periphery of Winchester with the site itself only accessible via two sides, one of which would be via an existing residential road with no through traffic. The access route onto the site is likely to be from Bar End Road near the existing roundabout to the Park and Ride car park. The new site access design will likely require a road safety audit to consider issues relating to the relatively narrow road width, the impact on pedestrians, bus turning movements, petrol station access, and forward visibility when leaving the site.

Although the site is close to an existing bus stop, the number and frequency of buses at this location is far less than at North Walls. Solely one bus service and the Park and Ride buses serve this location. The rail station is now much further away, so is not considered relevant to Bar End, unless as part of a trip home from the station.

When the addresses of the members are assessed it is apparent that the distance to travel for many of them would be greater. This could result in a higher number of journeys by car as access to the facility by foot or cycling becomes less attractive (as per WCC analysis). This will result in higher car parking space requirements, as demonstrated by application of parking standards, proportionately higher than North Walls as the area is not within a "high accessibility" location.

If the peak usage period remains in line with the 2009/2014 surveys, and lunchtime use is indeed a significant factor, then the number of lunch time visitors may reduce as the leisure centre location is less convenient to city centre workers. This then has the potential to create additional journeys at network peak periods should city centre workers then visit the facility either before or after work instead.

There is, however, the potential for cycle access, should routes be made safer and more desirable. The proximity of National Cycle Route 23 presents a key off-road/quiet cycle route option. On-road is more difficult due to limited options with Bar End Road being a fairly narrow

two-way road in places, and not having continuous footpaths along its whole length. On-road cycle provision will be dependent on the available road widths, which may be insufficient in places.

Whilst the Bar End site is located near M3 J10, its point of access is not adjacent to the motorway intersection. The Highways Agency will need to be consulted as part of the planning process as M3 J10 as part of the strategic road network. It is considered at this stage that the scale of development represented by the new leisure centre at Bar End is unlikely (by itself) to generate a level of additional development flows which would unduly concern the Highways Agency, and impact the performance of M3 J10. This would need to be demonstrated to the Highways Agency by way of a transport assessment, as part of the planning submission. The transport assessment, supported by the development proposals, will need to focus on evidenced car trip rate reduction, active promotion of alternative modes, and clear understanding of when trips to/from the leisure centre are likely to occur and how. If Bar End is selected as the preferred site, early consultation with the HA is encouraged.

Consideration could be given to the possibility of leisure centre users using the Park and Ride car park in lieu of site specific car parking provision. This could lead to the Park and Ride service being impacted as parking spaces become unavailable at times of peak leisure centre usage. The Barfield Park and Ride site is located a short walk from the Garrison Ground. There are informal crossing points for pedestrians across Bar End Road but pedestrians do experience difficulties crossing the road in this vicinity due to the traffic flows. Although this is conveniently located for the users of a potential leisure centre site, the primary function of this car park is for park and ride users. It is noted that this car park is available for use in the evenings for users of the Sports Stadium. The car park is owned by Hampshire County Council and leased to WCC to operate as a park and ride car park. It is very well used and is full to capacity during weekdays.

St Catherine's Park and Ride car park is also located nearby. This has some spare capacity at present but WCC is seeking to increase use of this site. It is also considered to be too far away from a new Leisure Centre at the Bar End site, to be an attractive or practical parking arrangement. Parking will clearly be a key issue for any transport assessment for Bar End.

## 9. CONCLUSIONS

This report has considered in high level terms the transport and access issues relating to the proposed relocation of the existing River Park Leisure Centre either within North Walls, or at a site in Bar End. In summary, this report has highlighted the following key transport and access related advantages and disadvantages for each site, as per Table 6.

**Table 6 Summary of transport issues per site**

Site	Advantages	Disadvantages
<b>North Walls</b>	<ul style="list-style-type: none"> <li>Wide choice of access modes and joined up trips – opportunity for sustainable access</li> <li>Little change in customer travel behaviour – limited impact/change</li> <li>Little change in customer catchment area – known travel options</li> <li>Close to major new residential area – can encourage sustainable access</li> </ul>	<ul style="list-style-type: none"> <li>High car access mode share – choice of mode and joined up trips not currently taken</li> <li>Car trip attracting land-use located in city centre area – adding to congestion</li> <li>Narrow roads within dense residential area – not best suited for access</li> <li>Conflicting parking demand with city centre parking – due to lack of joined up trips</li> </ul>
<b>Bar End</b>	<ul style="list-style-type: none"> <li>Close to main roads and M3 – matches high car access mode share</li> <li>Adjacent to National Cycle Route – alternative access option from city centre</li> <li>Options to share park and ride parking capacity – better use of parking resource</li> <li>Wider less busy local roads – better suited for access</li> </ul>	<ul style="list-style-type: none"> <li>Limited choice of access mode – impact will be higher</li> <li>Many existing customers are local to River Park – will need to travel further</li> <li>Reduction in lunch-time use – more customer access during critical network AM peak period</li> <li>Proximity to M3 J10 – need to engage with Highways Agency</li> </ul>

In conclusion, on transport grounds clearly both sites offer a mix of advantages and disadvantages. There are likely to be effective and viable, but different, transport and access solutions for both sites. On this basis, it is considered that the choice of site on transport and access grounds will vary according to priority and objectives. Currently it is unknown what the scheme access objectives are, but it is expected any access related scheme objectives would focus on the themes of safety, economy, environment, integration and accessibility. Table 7 is intended to give a high level consideration of the site options against these broad thematic headings.

**Table 7 Consideration of site options**

Site	Safety	Economy	Environment	Integration	Accessibility
<b>North Walls</b>	Narrow/busy residential and city centre streets	Parking and access options are already in place	Options for joined up trips and sustainable access	Land-use is already established by existing facility	City centre has highest levels of accessibility for all modes
<b>Bar End</b>	Wider/quiet roads directly off main road network	Would need access improvements for bus, cycle and walk modes	Would encourage some longer and additional car trips	Close to other sports facilities so would fit in	Lower level of accessibility owing to limited bus/cycle/walk options
<b>Outcome</b>	Bar End, subject to design & audit	North Walls, as all access facilities are in place	North Walls, but very much subject to changes in travel behavior	Neutral	North Walls, due to higher levels of accessibility by all modes

On the basis of this high level objective review, North Walls scores better from a transport and access perspective, but the picture is not absolute. For example, on environment, should Bar End effectively link into the park and ride bus system and parking, this would mean Bar End

would be more comparable to North Walls. Likewise, should existing travel behaviour not change at North Walls (from that seen at River Park), then the value of having the options for non-car access will be nullified by lack of actual use by leisure centre customers. Effective travel demand management measures will be critical to capitalize on the sustainable access opportunities of a site within North Walls.

Once a preferred location has been selected, and the development proposals defined, as part of the preparation for planning, a Transport Assessment should be undertaken to establish the likely impacts and potential mitigation options for the proposed development. This would establish likely travel patterns, parking provision, and impact upon key junctions based on traffic modelling within the wider study area.

**APPENDIX A  
RIVER PARK LEISURE CENTRE 2014 TRAVEL SURVEY**

Intended for  
**Winchester City Council**

Document type  
**Report**

Date  
**July, 2014**

# RIVER PARK LEISURE CENTRE

## 2014 TRAVEL SURVEY

## **RIVER PARK LEISURE CENTRE 2014 TRAVEL SURVEY**

Revision      **1**  
Date            **11/07/2014**  
Made by        **Hilde Norddal**  
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## APPENDICES

### **Appendix 1**

Origins Post Codes

### **Appendix 2**

Destinations Post Codes

### **Appendix 3**

Origin Post Codes and Densities

### **Appendix 4**

Destination Post Codes and Densities

### **Appendix 5**

Modal Split of Arriving Trips

### **Appendix 6**

Predominant Modes of Arriving Trips

# 1. INTRODUCTION

## 1.1 Background

Winchester City Council (WCC) has carried out a travel survey at the River Park Leisure Centre (RPLC) in Winchester. The purpose of the travel survey has been to gain an understanding of the journeys made by visitors, including identification of where visitors come from and go to and mode of travel. The purpose of this report is to present a factual summary of the collected data, to inform the high-level consideration of transport issues, for the proposed leisure centre sites.

## 1.2 Appendices

At the rear of this report are a set of appendices (Appendix 1 -6). These appendices should be read in conjunction with the review of collected survey data presented below. Appendix 1 and 2 show origin and destination locations, origin and destination postcodes and densities are presented by Appendix 3 and 4, with modal split of arriving trips given by Appendix 5, and predominant mode of arriving trips set out in Appendix 6.

## 1.3 Travel Survey Period

The travel survey took place over 14 continuous days from Saturday 22nd March to Friday 4th April 2014. The interviews took place over an 8 hour period each day. In order to survey a broader section of visitors the survey times varied between morning, afternoon and evenings as detailed in Table 1, below.

**Table 1 – Travel Survey Period and Timings**

Date	Period	Hours
Saturday 22.03	PM	12:00 - 20:00
Sunday 23.03	AM	07:00 - 11:00
Monday 24.03	Evening	15:00 - 23:00
Tuesday 25.03	PM	12:00 - 20:00
Wednesday 26.03	PM	12:00 - 20:00
Thursday 27.03	AM	09:00 - 17:00
Friday 28.03	AM	06:00 - 14:00
Saturday 29.03	AM	07:00 - 15:00
Sunday 30.03	Evening	15:00 - 23:00
Monday 31.03	Evening	15:00 - 23:00
Tuesday 01.04	PM	12:00 - 20:00
Wednesday 02.04	PM	12:00 - 20:00
Thursday 03.04	PM	12:00 - 20:00
Friday 04.04	AM	06:00 - 14:00

The opening hours of RPLC are Monday to Friday 06:00 to 23:00; Saturday 06.30 to 20:00 and Sunday 07:00 to 23:00. Weather conditions were observed and it was considered standard conditions for the season; mixture of sunny, clear and light rain.

## 1.4 Travel Survey Technique

The interviews were carried out in the reception area. Visitors arriving and departing were selected for interview, but only one interview per person per visit was obtained. If someone had already been interviewed despite it being a different day or time they were not re-surveyed. The minimum age of an interviewee was set to 18 years so no children were approached.

## 1.5 CCTV

A CCTV survey of total pedestrian movements was carried out in parallel to the travel survey, this was used to validate the interview survey numbers and assess the response rates.

## 2. SURVEY INFORMATION

### 2.1 CCTV Movements

A total of 35,014 incoming one-way movements were registered through the CCTV survey period. These numbers include visitors, staff and service personnel and anyone leaving and re-entering the building would be registered twice.

The CCTV survey recorded the largest variance in centre use on Sundays where the visitor numbers varied between 1,300 on the 30<sup>th</sup> March and 2,150 on the 23<sup>rd</sup> March, indicated by the green columns in Figure 1. Other days of the week exhibited a similar demand each week.

The CCTV survey indicates an average of 2,630 one-way movements at weekdays and this number has been used to scale the survey results up to an average weekday level.

**Figure 1 – Number of Visitors per Day**

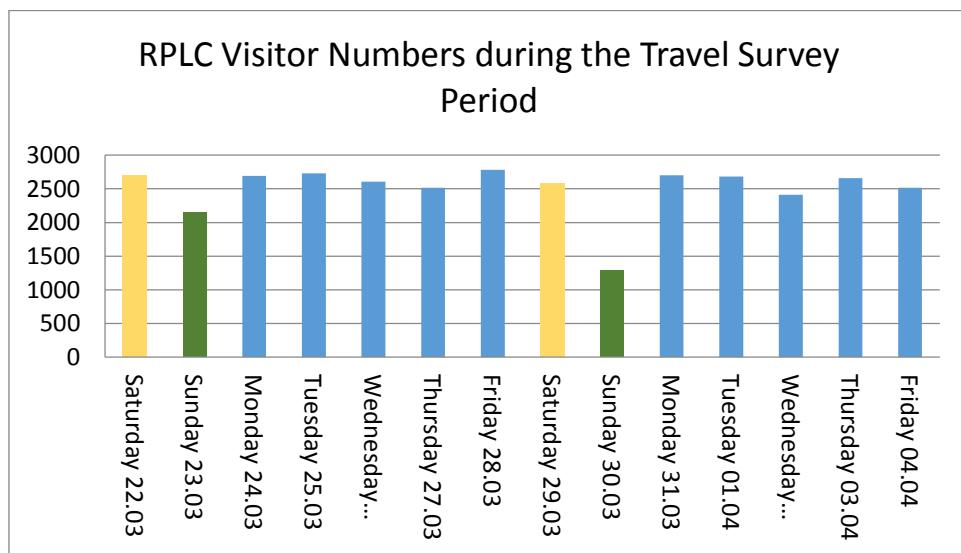
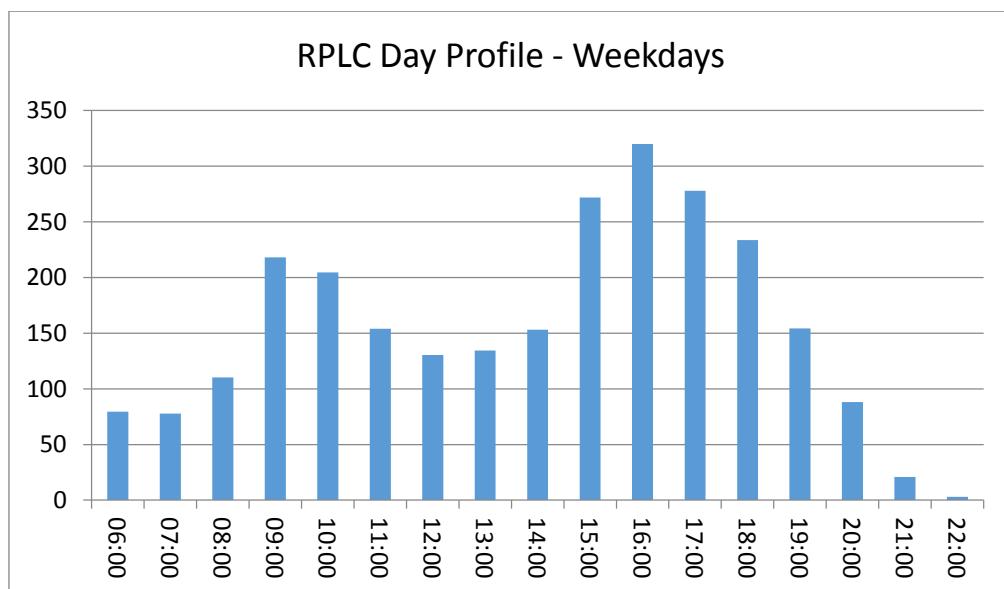


Figure 2, below, details the daily profile of visitors for Monday to Friday and indicates two distinct peak periods; these are 09:00 to 11:00 (AM-peak) and from 15:00 to 19:00 (PM-peak). More than half of the visitors each day (54%) arrive during a 6-hour period between 14:00 and 20:00. The PM-peak includes the busiest hour of the day which falls between 16:00 and 17:00 and the demand for this time period represents 12% of the overall daily visitors.

**Figure 2 – Visitor Day Profile**

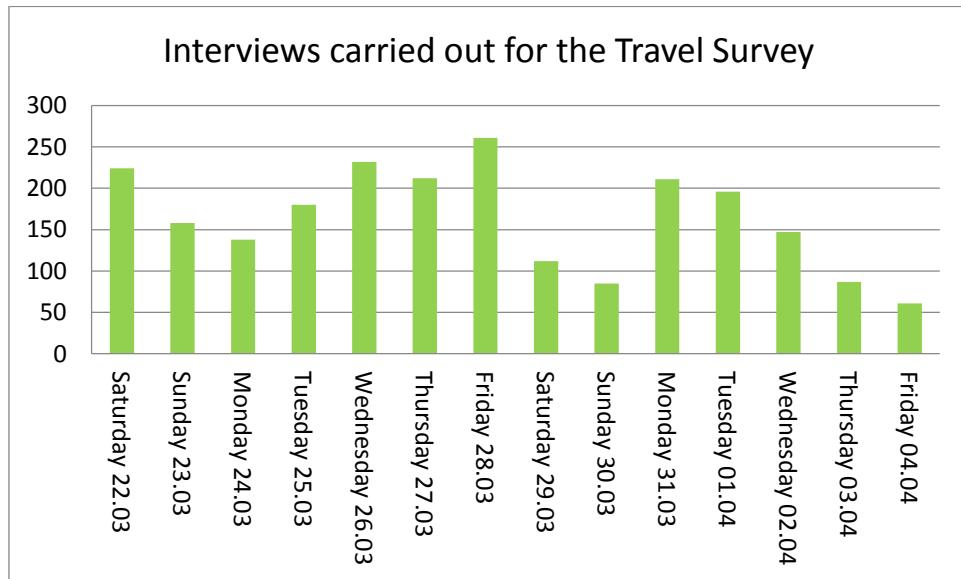


## 2.2 Travel Survey Sample

The travel survey was carried out over 183 hours and a total of 19,359 incoming one-way movements were registered during the travel survey interview hours. This resulted in a total of 2,304 interviews, giving a recorded interview response rate of 12%.

The number of interviews per day varied between 60 and 260, as shown in Figure 3 below.

**Figure 3 – Interviews for Travel Survey**



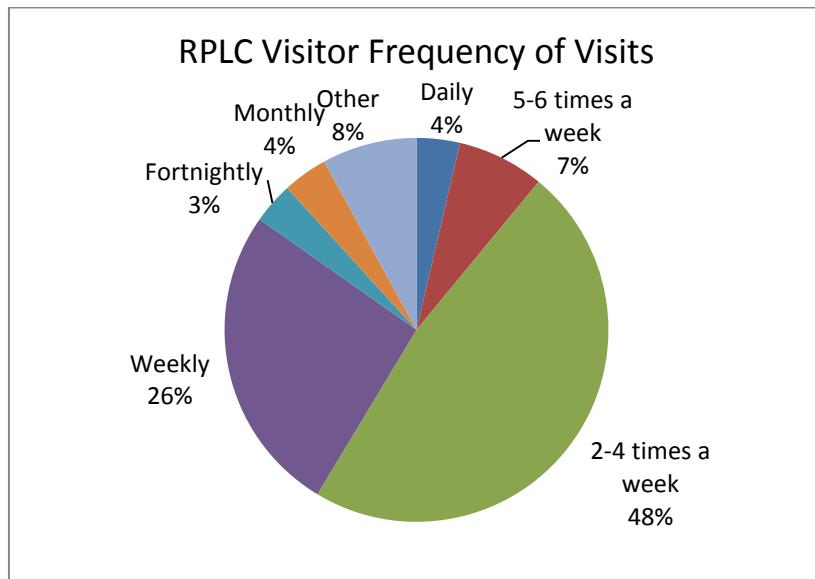
83% of the trip origins and 72% of the destinations were identified by postcode. Since the survey sample for the trip length analysis is lower there is a small discrepancy between the modal split analysis for the travel survey as a whole (Chapter 5) and the modal split analysis for samples where trip origins and destinations were identified (Chapter 7).

### 3. DURATION OF STAY

#### 3.1 Frequency of Visits

The question being asked was "How often do you come to the leisure centre?" The travel survey results show 11% of the users visit RPLC between 5 and 7 times per week. 48% of the users answered they come to RPLC 2-4 times per week while 26% answered they visit the centre on a weekly basis. Comments given as "other" includes rarely (3%) and first time visitors (2%). The results are illustrated in Figure 4 below.

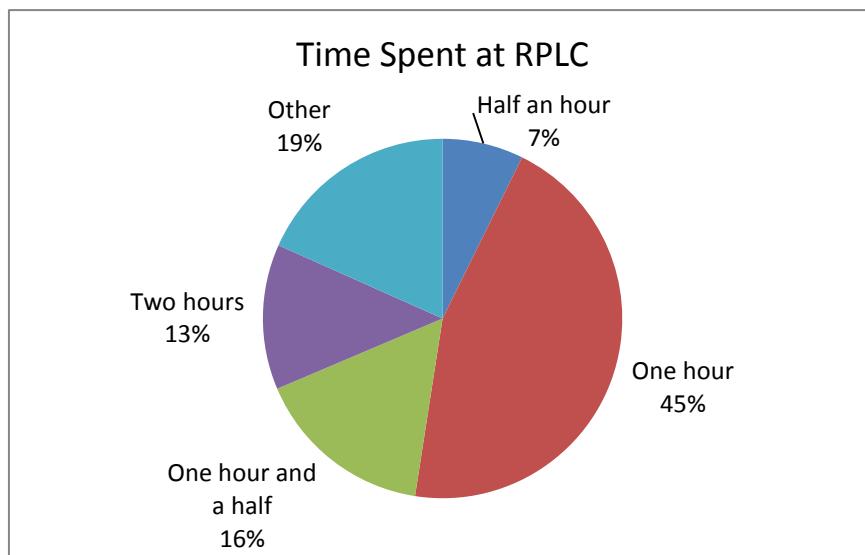
**Figure 4 – Visitor Frequency of Visits**



#### 3.2 Duration of Stay

The question being asked was "How much time are you planning to spend or have spent at the leisure centre today?" 7% of responses indicated the time spent at RPLC was for up to 30 minutes; while 45% spent between 31 and 60 minutes at the centre. A total of 29% spend between 61 minutes and two hours at RPLC. The results are illustrated in Figure 5 below.

**Figure 5 – Duration of Stay**



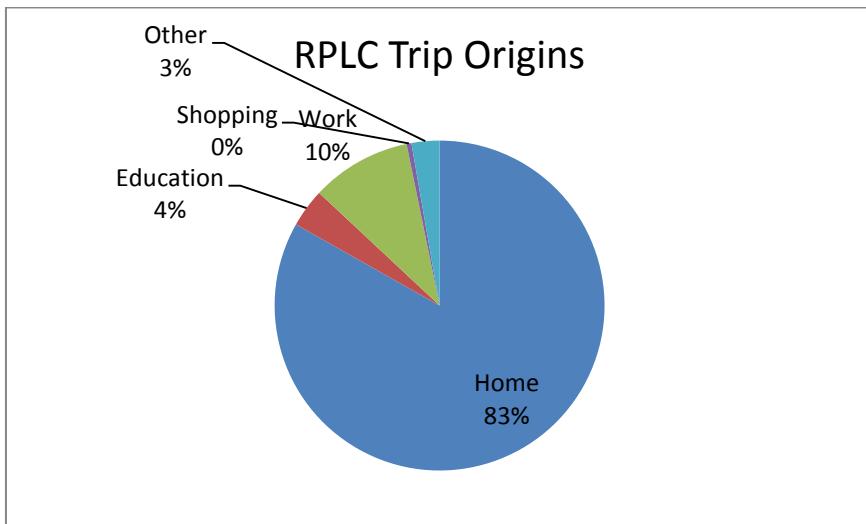
## 4. ORIGINS AND DESTINATIONS

### 4.1 Start of the Trip

The question asked was "Where did your specific trip to the leisure centre begin?" The pre-defined alternatives were "Home", "Education Facility", "Work", "Shopping" and "Other".

The travel survey results show that on an average weekday 2,188 (83%) visitors came directly from home, 258 (10%) came from work and 99 (4%) came to the centre from education facilities. The results are illustrated in Figure 6 below.

**Figure 6 – Trip Origins**

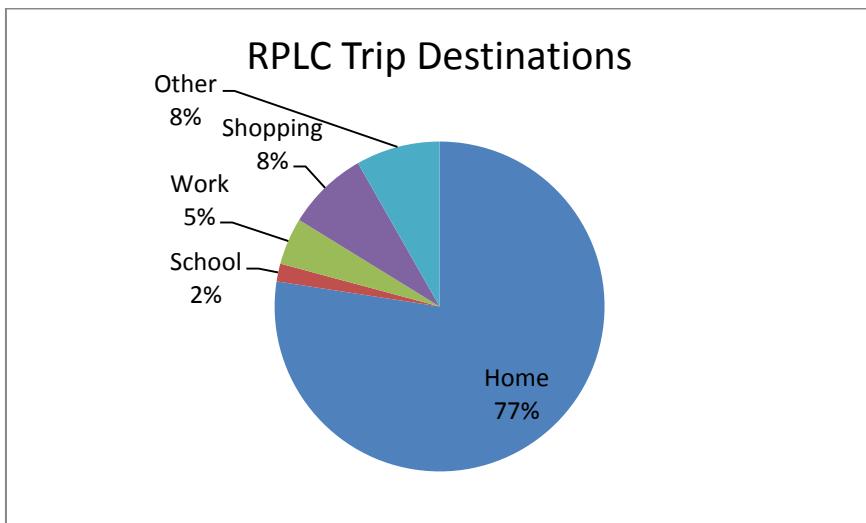


### 4.2 Trip Destinations

The question asked was "Where are you going after finishing at the leisure centre?" Pre-defined alternatives were "Home", "Education Facility", "Work", "Shopping" and "Other".

The travel survey results show on an average weekday 2,036 (77%) of the visitors were going home after visiting the RPLC, 210 (8%) were off shopping, 121 (5%) were off to work and 46 (2%) were off to education facilities. Answers given as others (8%) included social visits, food and entertainment. The results are illustrated in Figure 7 below.

**Figure 7 – Trip Destinations**

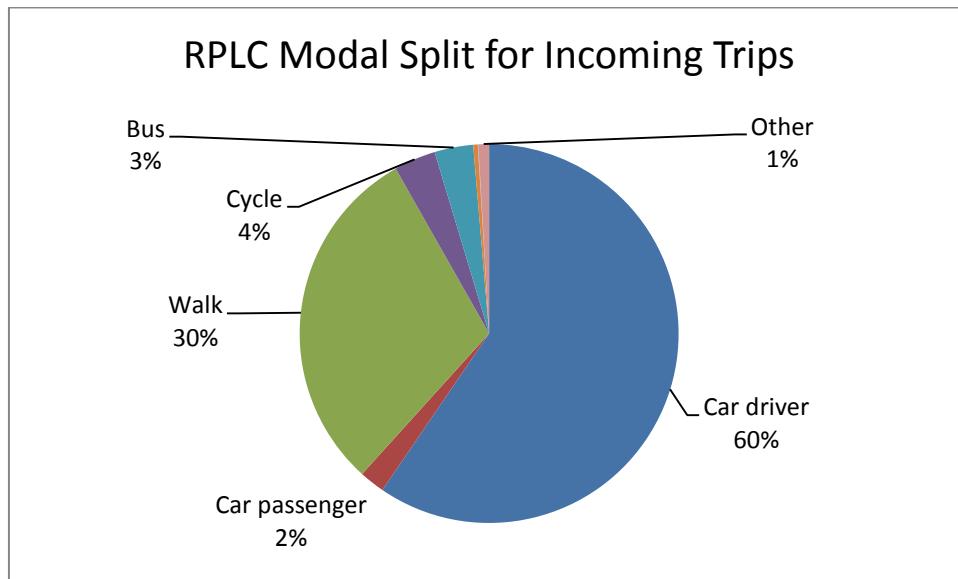


## 5. MODAL SPLIT

### 5.1 Modal Split

The question being asked was "How did you arrive at the leisure centre? The analysis of modal split for incoming trips shows that the majority of the visitors (62%) came in by car. On an average weekday 1,565 (60%) visitors drove a car themselves and 57 (2%) came in as car passengers. 791 (30%) visitors walked to and from RPLC, 4% of the visitors used a cycle and 3% came by public transport. The results are illustrated in Figure 8 below.

**Figure 8 – Visitor's Modal Split for Incoming Trips**



**Table 2 – Modal Split**

Mode of Travel	Share	Average Weekday
Car driver	60%	1,565
Car passenger	2%	57
Walk	30%	791
Cycle	4%	94
Bus	3%	87
Train	0%	10
Park and ride	0%	1
Other	1%	24
<b>Total</b>	<b>100%</b>	<b>2,630</b>

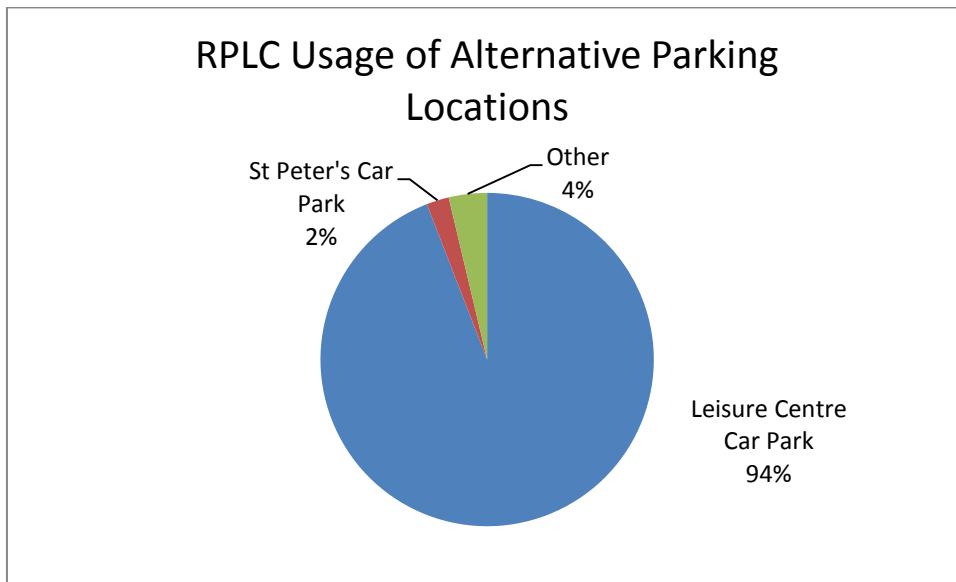
The question "How will you depart from the leisure centre" was also asked. 95% of the visitors used the same mode of travel for arrivals and departures. Amongst the 5% that had different modes for arrival and departure combinations of modes included "walk / car driver", "walk / car passengers" and "walk / bus".

## 6. PARKING

### 6.1 Parking Locations

The question being asked was "If you were driving; where did you park?" The travel survey results indicate that 94% of the car users parked at the RPLC car park and 2% parked at the St Peter's car park. Comments given as "other" included the car park at the nearby rugby club (1%). The results are illustrated in Figure 9 below.

**Figure 9 – Visitor Parking**



An average of 1,562 visitors would be driving a car to the Leisure Centre on an average weekday. Applied to the parking locations shown above this means there would be a daily demand at the Leisure Centre Car Park of 1,470 cars, 34 cars would use the St Peter's Car Park and 58 cars would be parked at other locations.

### 6.2 Comments on Parking Provision

There are frequent comments on a shortage of standard parking bays at peak times; this also includes disabled parking bays.

The parking charges are also commented upon, but the feedback is mixed. Some visitors think the parking charges are too high while others would welcome a higher fee level to reduce the demand from non-users of the RPLC and to encourage more walking and cycling.

There are some comments on lack of facilities for cycle parking and others find the circulation pattern (one-way system) confusing.

## 7. TRIP LENGTHS

### 7.1 Trip Lengths

The postcode information has been used to carry out an indicative distance analysis. The distance has been measured by the direct line of path, and not along roads, but will still give a good indication of how far visitors travel. Results for lengths of incoming trips are shown in Table 3 below.

**Table 3 – Lengths of Incoming Trips**

<b>Distance</b>	<b>Share</b>	<b>Average Weekday</b>
Up to 500 metres	15%	395
500 m - 1 km	14%	368
1 - 2.5 km	28%	736
2.5 - 5 km	17%	447
5 - 10 km	12%	316
10 - 25 km	11%	289
Longer than 25 km	3%	79
<b>Total</b>	<b>100%</b>	<b>2,630</b>

74% of the visitors have a trip length shorter than 5 km. On an average weekday 395 (15%) visitors start their trip within a distance of 500 metres. Another 14% of the visitors start their journeys within a distance of 1 km, 28% of the visitors have an incoming trip length of 1 to 2.5 km and 17% have a trip length of 2.5 to 5 km.

### 7.2 Modal Split and Trip Lengths

For trips longer than 1 km, car is the preferred mode. Walking trips are normally shorter than 2.5 km, cycling trips are normally shorter than 5 km and public transport trips are normally of a distance longer than 1 km.

**Table 4 – Length of Incoming Trip and Modal Split**

<b>Distance</b>	<b>Car</b>	<b>Walk</b>	<b>Cycle</b>	<b>PT</b>	<b>Other</b>	<b>Total</b>
Up to 500 metres	1%	12%	1%	0%	0%	15%
500 m - 1 km	6%	7%	1%	0%	0%	14%
1 - 2.5 km	19%	6%	1%	1%	0%	27%
2.5 - 5 km	14%	2%	0%	1%	0%	17%
5 - 10 km	12%	0%	0%	0%	0%	12%
10 - 25 km	10%	0%	0%	1%	0%	11%
Longer than 25 km	3%	0%	0%	0%	0%	3%
<b>Total</b>	<b>65%</b>	<b>28%</b>	<b>3%</b>	<b>3%</b>	<b>1%</b>	<b>100%</b>

Trips carried out by car (driver and passenger combined) stands for 65% of the total number of trips. 41% of the total number of trips are carried out by car and have a length shorter than 5 km.

Walking is the dominant mode among origins and destinations within a distance of 1 km. 19% out of a total of 29% were shorter than 1 km and carried out by foot. Trips carried out by cycle stands for 3% of the total number of trips and all cycle trips have a length shorter than 2.5 km.

**Table 5 - Length of Incoming Trip and Modal Split**

<b>Distance</b>	<b>Car</b>	<b>Walk</b>	<b>Cycle</b>	<b>PT</b>	<b>Other</b>	<b>Total</b>
Up to 500 metres	39	328	17	0	0	8
500 m - 1 km	154	190	24	0	0	4
1 - 2.5 km	507	151	32	31	0	3
2.5 - 5 km	367	40	13	34	0	3
5 - 10 km	304	7	1	8	0	3
10 - 25 km	260	7	3	17	1	0
Longer than 25 km	68	4	0	0	0	3
<b>Total</b>	<b>1,699</b>	<b>727</b>	<b>89</b>	<b>89</b>	<b>1</b>	<b>24</b>