

Expert Economics Report on Proposed Seacourt Park & Ride Extension.

R. Macey-Dare¹. December 2016

Dear Planning Officer and Planning Committee

Here is an expert report on the economics of the Seacourt P&R Extension. This has been produced to assist you in understanding of the real economic basis of the Seacourt P&R Extension proposal.

Yours sincerely, R.Macey-Dare

Executive Summary

- Oxford City Council have not produced any proper economic analysis to support their application.
- Oxford City Council and WYG do not have any proper economic demand forecasting analysis behind their own analysis.²
- Instead they have invoked the idea that the economics are self evident or in the WYG reports have used completely ad hoc i.e. invented future scenarios, disguised as forecasts.
- Recent Oxford City Council Executive Board Meeting Reports of 15 December 2016³ reveal that the current projected cost of the Seacourt P&R Extension is £4.1m and that expected annual return is £110 thousand p.a. for £2 per car parking charges rising to £160 thousand p.a. for £3 per car parking charges, providing lamentably low 2.7% p.a. and 3.9% p.a. returns on investment respectively.

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² WYG admit in the penultimate conclusion point para 7.1.5 of their key WYG Transport Planning Report that: "Whilst a demand forecast has not been undertaken, traffic modelling of a worst case scenario (where 100% of the additional capacity is utilised) has been undertaken"

³ See Oxford City Council City Executive Board Meeting 15 December 2016 Public Report Pack, p. 53, and p.101.

- However when additional risk costs are added in for surface relaying after flooding events (recently confirmed as required by the building suppliers) and expected damages for flooding compensation e.g. to cars, then the expected annual return on the project is negative.
- This would constitute an abusive waste of Oxford taxpayer money by Oxford City Council.
- Oxford City Council's own projected annual income of £110 thousand from the Seacourt P&R Extension, which is more likely to be optimistic than pessimistic, only equates to an average additional car space usage of c.75 spaces per day that can easily be accommodated, as is, within the existing Seacourt P&R.⁴
- The Oxford City Council Executive Board Meeting Reports of 15 December 2016 also helpfully reveal that the nearest Redbridge P&R with c.1400 car parking spaces, is actually already c.50% under-used.⁵
- In the very unlikely event that there was an increase in traffic demand for the Seacourt P&R from the Swindon direction, this could be redirected costlessly to the large existing spare P&R capacity reasonably nearby at Redbridge.
- Instead of a proper demand analysis, the Seacourt P&R Extension proposal presented by Oxford City Council, uses a single busy time window within a single cherry-picked extremely busy day at Seacourt and misleadingly presents this as representative data, in a clear abuse of statistics.

⁴ From the Oxford City Council City Executive Board Meeting 15 December 2016 Public Report Pack p.101 we can make the following calculations:

For 2017-2018, c.£110,000 extra revenue p.a. from the Seacourt P&R Extension divided by £2 per stay equates to 55,000 extra stays per year. 55,000 extra stays per year divided by 365 days per year equates to c.150.7 average extra stays per day. If each extra stay on average lasts 1/2 day (probably a high overestimate) then average extra car parking spaces needed per day equals 150.7 divided by 2 i.e. about 75 extra spaces needed per day, i.e. easily accommodated within the existing Seacourt P&R.

Similar results are calculated for 2018-2019, when projected revenue from the Seacourt P&R Extension is £160,000 p.a. and annual cost per stay is £3.

⁵ According to Oxford City Council City Executive Board Meeting 15 December 2016 Public Report Pack, p.202 and p.209, Redbridge peak demand is estimated at 762 spaces during weekdays and 524 spaces at weekends, with average spare capacity at c.630 spaces on weekdays and c.870 spaces at weekends.

This constitutes massive spare capacity and massive underutilization at Redbridge, which is the closest comparator P&R site to Seacourt and which also experiences much higher demand than Seacourt, through its A34 south traffic access route. These Redbridge figures also illustrate the folly of expanding the Seacourt P&R to match the overblown size of the Redbridge P&R.

- To re-evaluate this question, a broader set of 10 weekdays of Oxford County Council data is reanalysed below to show that there is no current evidence of any excess demand at Seacourt P&R.
- The economics and economic geography of the Seacourt P&R and western Oxford ring road are also analysed below to show that there is unlikely to be any such demand growth in the short and medium term.
- If there were, then a flexible, common sense approach such as progressively adding decking on the existing Seacourt P&R, which could be very low cost, or better use and redirection towards Redbridge or development of alternative P&R sites further out of town, taking traffic away from the city centre e.g. to Cumnor or Eynsham should be preferred.
- In short, this report concludes that there is no economic basis and no economic necessity supporting the Seacourt P&R Extension proposal and as such it should be rejected as a gross waste of public money.

Is the suite of WYG reports submitted with the application independent?

No. These reports are written to support the client Oxford City Council's proposed Seacourt Park & Ride Extension and so tend to highlight information that could support the application and to ignore or downplay information that does not support the application.

What are the key features needed to support the Proposed Seacourt Park & Ride Extension and have they been included in the proposal?

- Proper future demand forecasting modelling for Seacourt Park & Ride⁶ - not provided with the application⁷

⁶ This is likely to be produced by economic, statistical and econometric analysis, producing both annual forecasts from 2016 to 2030+ and distribution ranges around the forecasts and to be based on quantitative statistical and economic data and sensible economic theory.

- Proper analysis of alternative options- not provided with the application⁸
- Proper analysis of constraints- not provided with the application⁹

Is the Seacourt Park & Ride area currently short of enough good public access parking?

No.

- A feature completely overlooked and ignored by WYG and Oxford City Council in their application, is that the current Seacourt Park & Ride is already surrounded by an additional **1300+ car parking spaces**, free for each 3 hours

What WYG do instead is use hypothetical (i.e. invented) scenarios such as doubling or more than doubling of demand for Seacourt Park & Ride. This assumes the very thing they need to prove and WYG's use of these scenarios instead of proper forecasts is prone to mislead the lay reader.

⁷ The author made an FOIA request 6124 on 7 November 2016 to Oxford City Council for evidence and results of any such modelling. The Oxford City Council response set out below confirms that no such modelling has taken place and that their economics is based on one peak time "cherry-picked" observation from their whole data sample.

"Response of Oxford City Council to FOI 6124 22 December 2016: "**Oxford City Council has not yet undertaken any future assessment of this as part of the planning application.** Seacourt park and ride has provided the current 794 car parking spaces since the early 1980s and is now operating at capacity. As identified in the Transport Assessment, from survey data undertaken in February 2016, the P&R reached a maximum of 95.7% capacity during the [single] day with the P&R being over 90% full from 10am through to 4pm. This has been taken into account along with the planning transport assessment for the Westgate development which can be found in our planning portal.

⁸ The Flood Risk Sequential Test cited by WYG is a, designed-to-fail, tick-box-version of considering alternatives. Note that many of the constraints that rule out these alternative sites such as Green Belt, Greenfield, Flood Zone 3B, are also present at the proposed Seacourt Extension. The constraint that Oxford City Council has already to own the land is a false constraint because there is a market in tradable land.

⁹ These constraints include key legal constraints such as Oxford Core Strategy Policy CS2, which for some reason is overlooked by WYG.

to users, very easily accessible and located right next to large shops such as Aldi and Currys¹⁰

- The current usage of Seacourt Park & Ride is reasonable and not excessive, and for much of the week Seacourt Park & Ride is actually underused. However by focussing on occasional peak demand, WYG create a misleading impression that there is currently excess demand and under-supply.¹¹

What are the possible sources for increased demand at Seacourt Park & Ride and are they actually likely to increase demand at Seacourt Park & Ride in the medium term?

The potential sources for increased demand at Seacourt Park & Ride are:

1. Additional shoppers arriving by car to shop in the Botley Road area
2. Additional shoppers arriving by car to shop in the central Oxford area
3. Additional shoppers arriving by car to shop in Oxford but outside Botley Road and central Oxford areas
4. Railway commuters from Oxford
5. Coach commuters from Gloucester Green
6. Road visitors to Oxford from: London, Reading, Banbury, Bicester, South and North.
7. New employees working within Oxford City but living outside and driving in via the Botley Road

However none of these are likely to increase demand at Seacourt Park for reasons set out below:

1) Additional shoppers arriving by car to shop in the Botley Road area:

¹⁰ The additional parking in the Seacourt Park & Ride area is examined in detail below.

¹¹ The Seacourt Park & Ride data provided by Oxford County Council to WYG is reanalysed below to show these points clearly.

Figure 1 below, shows that Seacourt Park & Ride is actually surrounded on the South East and West by nearby parking. This is typically very high quality parking, free for each 3 hour usage, easily accessible and right next to the shops that customers are visiting. There are c.**1300 such car parking bays** , typically c.200 yards from Seacourt Park & Ride and these car parks tend to have high spare capacity, together already providing total current public access parking of c.2100 spaces at and around the existing Seacourt P&R.

To see whether additional shoppers arriving by car to shop in the Botley Road area are likely to create additional demand for Seacourt Park & Ride, we have to consider the typical consumer choice of either i) park right next to the target shop for free or ii) pay the parking charge, say £2, £3 and walk from the shops to the Park & Ride.

For example consider a customer doing family shopping. Will she a) choose to wheel a trolley full of food from Aldi a few yards to her car parked in Aldi car park or b) choose to carry heavy shopping bags 100 yards and over a main road back to the Park & Ride where she also made an additional parking charge?

Consider another customer getting supplies from Wickes. Will he a) choose to wheel the supplies from Wickes a few yards to his vehicle parked in the Wickes car park or b) choose to carry or wheel heavy building material 100 yards and over a main road back to the Park & Ride where he also made an additional parking charge?

These examples illustrate that because the extensive shopping facilities along the Botley Road are already so well supplied with their own dedicated, better, closer and cheaper parking, it would be ridiculous to forecast an increase in demand for Seacourt Park & Ride from additional shoppers arriving by car to shop in the Botley Road area.

2) Additional shoppers arriving by car to shop in the central Oxford area

People driving in to shop in central Oxford face 2 choices, namely what access route to use into Oxford and where to park their cars.

Local people know that the Oxford ring road can be often congested and occasionally blocked. Therefore they are very unlikely to do extra laps round the ring road, if they are coming shopping in the city centre.

This means that traffic demand coming down the Botley Road is likely to come from West Oxford, Botley, Vale of White Horse and the A420. This in turn explains why

traffic demand down the Botley Road has not grown over the last 10 years¹² and is unlikely to grow significantly in the medium term.

Now consider the choice faced by a car of shoppers driving down the Botley Road for a central Oxford shopping trip.

They can either a) stop at Seacourt Park & Ride, pay the Park & Ride charge of £2, £3 and bus fares, say £5 for a family, and travel back afterwards from the city centre to Seacourt Park & Ride carrying heavy shopping on the bus or b) drive into the city centre, park their car for say £7,8 in a central car park¹³ and then walk from there to the shops and back with their shopping.

Since the overall costs of city centre parking v Seacourt Park & Ride + bus fares are comparable for city centre shoppers coming down the Botley Road, there is typically no reason for city centre shoppers to park in Seacourt Park & Ride rather than in alternative city centre parking, and consequently on the main shopping days i.e. weekends and bank holidays, Seacourt Park & Ride usage can be very low.

3) Additional shoppers arriving by car to shop in Oxford but outside Botley Road and central Oxford areas

It is inherently unlikely that there will be much demand or demand increase to park at Seacourt Park & Ride from shoppers who want to shop outside the Botley Road and central Oxford areas.

To illustrate, suppose that someone wants to shop at Sainsbury's Heywards Hill in East Oxford. Then instead of parking in Seacourt Park & Ride they would be much more likely to either drive round on the ring road to their destination or to drive through Oxford. Both strategies would be much quicker and more manageable.

¹² Discussion with Councillor Cook, November 2016.

¹³ Competitor city centre parking includes: Worcester St (217 spaces), Oxpens (420), Gloucester Green (105 spaces), New Westgate (c.1000 spaces) totalling: c.1742 spaces

Suppose that someone wanted to shop in Summertown in North Oxford, then they would be much more likely to go round via the ring road or drive directly through Oxford and park in Summertown, say at Ferry Leisure Centre.

4) Railway commuters from Oxford

It is possible but very unlikely that there will be increased demand for Seacourt Park & Ride from Oxford Rail commuters, for 2 reasons.

Firstly Oxford has a medium term strategy of sharing out Oxford railway commuters from Oxford main station to Oxford Parkway and the faster route to London Marylebone.

Secondly, Oxford stations have their own dedicated and competitively priced adjacent parking used by commuters. Oxford Parkway uses the adjacent Park & Ride facility at Water Eaton. Oxford main line station has its own dedicated NCP parking adjacent to the station.

So a typical Oxford to London commuter has a choice of either i) drive down the Botley Road and park at Seacourt Park & Ride and add an extra 1/2- 1hour of walking or bus journeys to their daily route or ii) park directly in the Oxford Main Station car park, or use Oxford Parkway instead.

So this is an unlikely source of demand growth for Seacourt Park & Ride.

5) Coach commuters from Gloucester Green

It is possible but unlikely that there will be increased demand for Seacourt Park & Ride from Gloucester Green coach commuters who also drive cars.

One of the main categories of such commuters are travellers to and from London and London airports. These commuters typically have bags and may travel at off peak hours. They face the choice of either: a) driving down the Botley Road, parking at

Seacourt Park & Ride and then walking or waiting for a bus connection to Gloucester Green or b) driving to Thornhill Park & Ride where all the London and airport coaches stop, and parking right next to the coach stop and cutting out intervening bus journeys and also reducing 1/2 hour each way from their coach journey times.

Another key category of Gloucester Green coach commuters are commuters stopping off at Oxford on a longer coach journey. However these commuters by definition will have arrived in Oxford by coach not car.

6) Road visitors to Oxford from: London, Reading, Banbury, Bicester, South and North

It is unlikely that there will be an increase in demand for Seacourt Park & Ride parking from long distance road visitors to Oxford from: London, Reading, Banbury, Bicester, South and North, for reasons illustrated in Figure 2, taken from the WYG reports.

Figure 2 shows the Oxford ring road with Park & Ride facilities: Water Eaton and Pear Tree c 5km north of the city centre, Thornhill Park & Ride c.5km east of the city centre, Redbridge Park & Ride c.3km south of the city centre and Seacourt Park & Ride c.1km west of the city centre.

As figure 2 shows, the Water Eaton and Pear Tree Park & Rides pick up incoming traffic from the A34 north, A40 and A44 north i.e. from Banbury, Bicester, Kidlington, Whitney and the North of England.

Thornhill Park & Ride picks up traffic from A40 (M40) south and London, Heathrow, Gatwick and south.

Redbridge Park & Ride picks up traffic from A34 south and Reading.

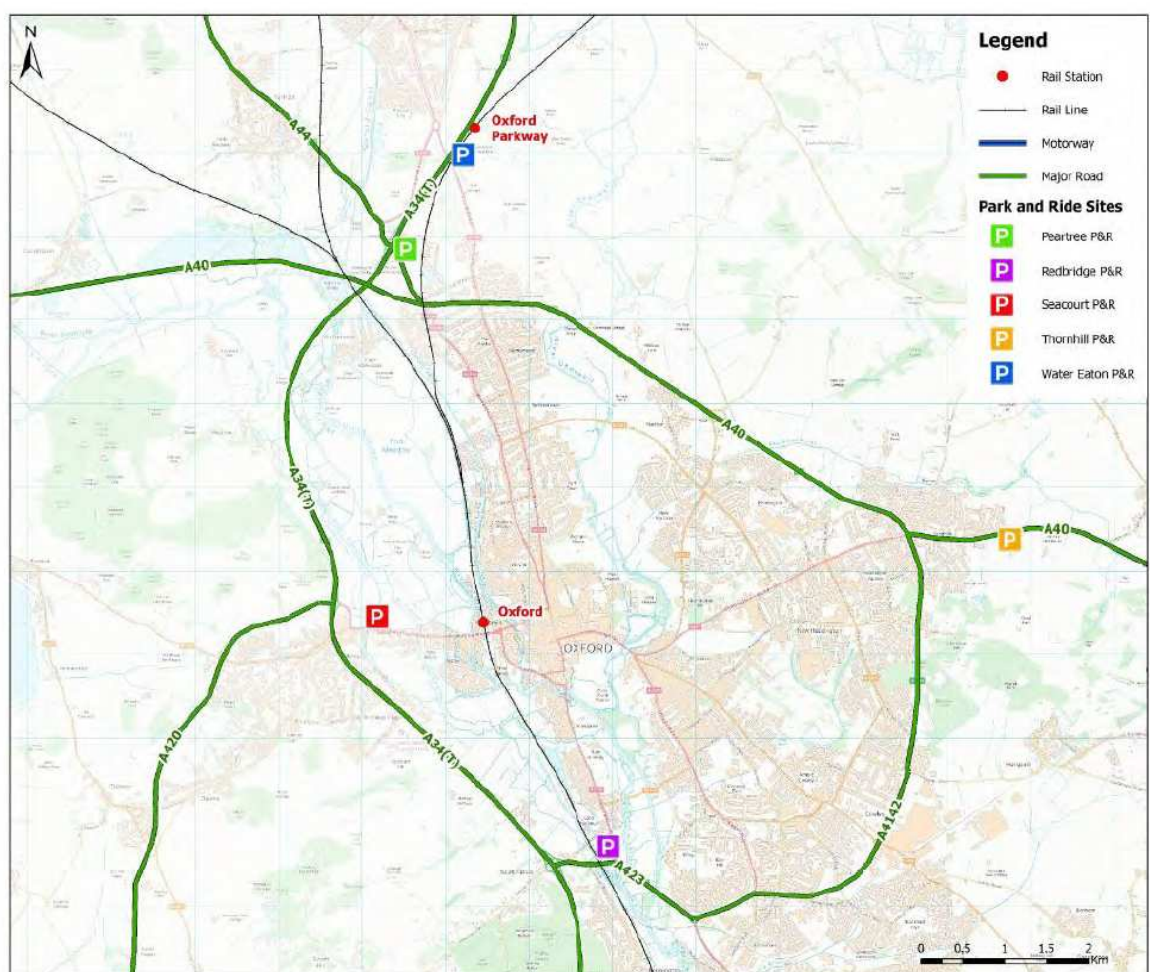
Seacourt Park & Ride picks up traffic from A420 west and Swindon and from Vale of White Horse.

Clearly it is possible for car traffic arriving at Thornhill Park & Ride from the A40 (M40) south, to drive past Thornhill and head round the ring road for alternative Park & Rides e.g. at say Redbridge, Pear Tree or Water Eaton. However what would be normally expected would be either that the car stopped at Thornhill Park & Ride car park and the occupants used the Park & Ride or that the car drove on to the centre of Oxford.

The same argument applies to all the other Park & Ride sites, i.e. cars arriving from outside Oxford on the arterial feeder roads are either likely to stop at the first Park & Ride they encounter or to drive on further directly into the centre of Oxford.

This strategy also makes sense since city ring roads generally and Oxford Ring Road in particular can often become congested or blocked.

Figure 2 – Oxford Park and Ride Locations



What this in turn means is that there is likely to be little demand for extra parking at Seacourt Park & Ride coming directly from road visitors to Oxford from: London, Reading, Banbury, Bicester, South and North, whatever happens to the number of visitors to other Park & Rides located at other corners of the city.

There might well be increased demand for extra parking at Seacourt Park & Ride coming directly from visitors to Oxford from the A420 west and Swindon and Vale of White Horse. However there is no reason to expect any increase in traffic from this particular direction. Swindon may very well grow, but it is unlikely that many Swindon people will divert to travelling along the A420 to do their shopping in Oxford instead.

7) New employees working within Oxford City but living outside and driving in via the Botley Road

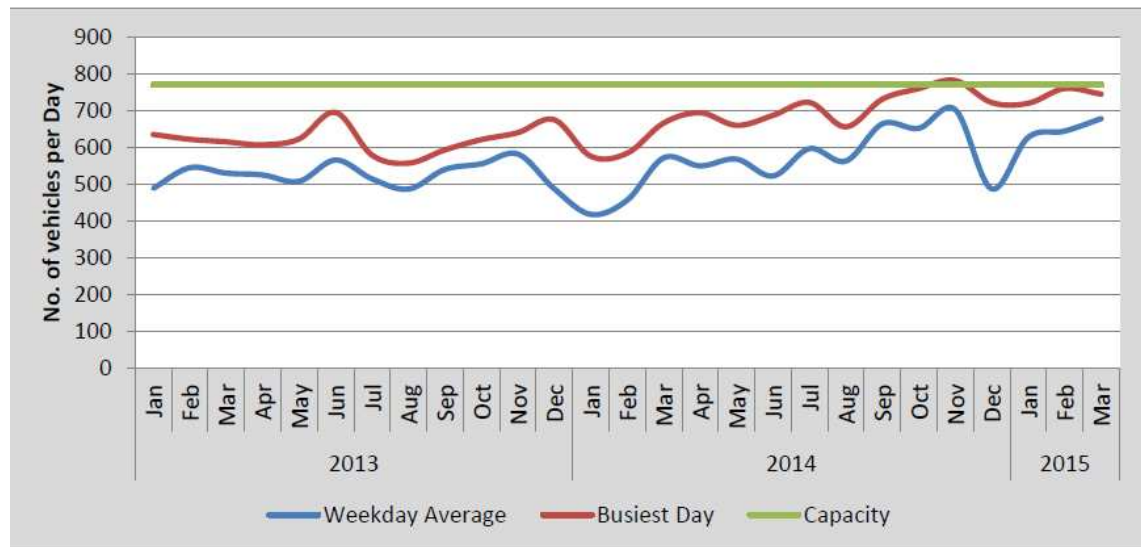
Oxford City Council has laudable plans to increase employment in Oxford City. However growth in Oxford based work is likely to be in Oxford's industrial areas to the East of the City and in Science Parks to the East and North. There is in fact unlikely to be significant jobs growth in the city centre itself outside the university, which typically provides its own dedicated staff parking. There is employment along the Botley Road and this is typically professional employment with dedicated parking provided, such as Blake Morgan solicitors, or shop work e.g. Aldi where staff typically arrive by bus or foot.

Consequently there is unlikely to be significant demand for additional parking at Seacourt Park & Ride from new employees working within Oxford City but living outside and driving in via the Botley Road.

Current usage at Seacourt Park & Ride is reasonable and not excessive

In their Transport Planning Report, WYG present 2.5 years of recent data showing car park usage at Seacourt Park & Ride.

Figure 4 – Seacourt P&R Maximum Daily Occupancy



Key features from this graph are as follows:

- There is a noticeable dip around January 2014. This reflects significant flooding around Botley Road and Seacourt Park & Ride.¹⁴
- The graph also starts in January 2013 specifically to avoid showing the dip in November and December 2012, when Botley Road and Seacourt were affected by major flooding.¹⁵
- There can be occasional peaks in demand so the weekday average is typically significantly less than the busiest weekday, and the weekend average in turn is typically also less than the weekday average, so even lower than the blue curve.

¹⁴ See e.g. Oxford Mail 14 January 2014 "*Hundreds advised to leave as floods shut Botley Road*" at http://www.oxfordmail.co.uk/news/10923111.Hundreds_advised_to_leave_as_floods_shut_Botley_Road/ and BBC News online 12 January 2014 "*Flooded Botley Road in Oxford reopened after clear-up*" at: <http://www.bbc.co.uk/news/uk-england-oxfordshire-25703878>

¹⁵ See e.g. BBC News online 29 November 2012: "*Oxford floods- clean-up as water recedes*" at <http://www.bbc.co.uk/news/uk-england-oxfordshire-20511429>

- November 2014 shows the busiest day occupancy actually greater than maximum car park capacity. By definition this is almost certainly a graph error (unless cars were stacked on top of each other) and may indicate bias by WYG in overestimating busiest day statistics.

In their Transport Planning Report, para 3.5.7 WYG also present a graph showing Seacourt Park & Ride occupancy on a single day 25 February 2016, with peak occupancy over 90%. However the reason why WYG only use 1 day of data here, and a restricted time window within this day, is most probably because they have "*cherry-picked*" a rare day of exceptionally high or peak usage and chosen to leave out other days with lower occupancy rates (which would of course be less persuasive).

Fortunately, later in their Transport Planning Report, at para 6.3.1, WYG also cite independent 10 weekday average data for Seacourt Park & Ride occupancy, compiled by Oxford County Council in June 2015, which are used below to investigate the existing occupancy rates and spare capacity at Seacourt Park & Ride:

Table 4: Existing Usage of Seacourt Park and Ride Car Park

Time	Inbound Vehicles	Outbound Vehicles	Accumulation	% Occupancy
05:00 - 06:00	4	0	4	0.5%
06:00 - 07:00	52	2	54	7.0%
07:00 - 08:00	201	4	251	32.6%
08:00 - 09:00	241	8	484	62.9%
09:00 - 10:00	99	4	579	75.2%
10:00 - 11:00	51	8	621	80.8%
11:00 - 12:00	36	12	645	83.9%
12:00 - 13:00	24	23	646	84.0%
13:00 - 14:00	24	35	635	82.5%
14:00 - 15:00	12	44	603	78.3%
15:00 - 16:00	12	60	554	72.0%
16:00 - 17:00	10	139	425	55.3%
17:00 - 18:00	11	227	209	27.2%
18:00 - 19:00	9	123	95	12.4%
19:00 - 20:00	5	38	62	8.1%
20:00 - 21:00	2	24	41	5.3%
21:00 - 22:00	2	13	30	3.9%
22:00 - 23:00	2	14	18	2.3%
23:00 - 24:00	1	6	13	1.6%

Taking Seacourt Park & Ride maximum capacity at 794 spaces, this means that over the 10 day representative sample period, greatest average car park capacity utilization was 84%, lowest average car park spare capacity was 16% (i.e. about 1 space in 6 being free, and an average 10m drive to the next free space). and lowest average number of free spaces was 127.¹⁶

Note also that the period of lowest capacity was concentrated around midday and lower in the morning and afternoon.

¹⁶ N.B. There is a misleading suggestion in the WYG reports that it is understood that car parks need to be expanded if their capacity exceeds 85% occupancy. In fact what the relevant report actually suggests is that at 85% occupancy or above, where 1 bay in 6 is typically free, there is enough demand to allow parking charges and parking revenue both to be profitably raised, which is what Oxford City Council also intend to do.

Average time in hours	% Occupancy	% Free	Average spaces	Average bays to find free spot
5.5	1%	100%	790	1
6.5	7%	93%	738	1
7.5	33%	67%	535	1
8.5	63%	37%	295	3
9.5	75%	25%	197	4
10.5	81%	19%	152	5
11.5	84%	16%	128	6
12.5	84%	16%	127	6
13.5	83%	18%	139	6
14.5	78%	22%	172	5
15.5	72%	28%	222	4
16.5	55%	45%	355	2
17.5	27%	73%	578	1
18.5	12%	88%	696	1
19.5	8%	92%	730	1
20.5	5%	95%	752	1
21.5	4%	96%	763	1
22.5	2%	98%	776	1
23.5	2%	98%	781	1

The same Oxford County Council 10 weekday data can be further analysed to show average percent free capacity and average number of free spaces at Seacourt Park & Ride over different daytime time periods of the sample days, as shown below.

