

**REVIEW OF PAY & DISPLAY CAR PARKING AS THE PREFERRED PAYMENT  
/ CONTROL SYSTEM IN RBWM OWNED AND MANAGED CAR PARKS**

OFFICER REPORTING: DAVID SCOTT – HEAD OF COMMUNITY SERVICES

**1. PURPOSE OF REPORT**

This report considers the differences between Pay and Display (P+D), Pay on Foot (PoF) or Pay on Exit (PoE) control systems, following the introduction of P+D to replace the previous PoF system in the Nicholson's Multi Storey Car Park (MSCP) introduced and implemented in March 2008.

The former PoF system in Nicholson's MSCP was replaced as it had passed its economic operation and was becoming increasingly unreliable and more expensive to operate and maintain.

**2. CONCLUSIONS FROM THE REVIEW**

- 2.1** There are primarily three different parking control systems in widespread use in charged for car parks, Pay on Foot, Pay on Exit and Pay and Display, These have different strengths and weaknesses which are outlined in Appendix A appended to this review.
- 2.2** Pay and Display parking control equipment is widely used throughout the Royal Borough, which operates a mixed parking stock of off street surface and multi storey car parks and on street parking spaces, and over a long period there has been a gradual move towards this type of equipment as the standard system deployed in RBWM operated and managed car parks and through the paid for on street parking spaces.
- 2.3** There are no hard and fast rules about which type of equipment should be used in different types of situations, however where a car park is heavily used by shoppers, feedback from retailers and their customers indicates a preference for either Pay on Foot or Pay on Exit systems, whereby payment for parking is made at the end of the parking stay and on return to the vehicle, thereby avoiding the need to decide at the time of arrival and parking the intended duration of stay. This is in contrast with a Pay and Display system whereby at the arrival and the beginning of the parking stay, a decision needs to be made about the proposed stay duration, and if a longer period of stay is subsequently required, a return visit to the vehicle and pay station must be made to purchase an additional stay period.
- 2.4** The decision to replace the Nicholson's MSCP Pay on Foot system with Pay and Display equipment was made based upon a number of factors at the time which included the relatively uncertain long term future of the existing car park, the overall cost and ongoing operating costs of the equipment, harmonisation and integration with the other RBWM equipment and the consequential flexibility for re-use of the equipment and the potential for resident discounts using the existing Advantage Card.
- 2.5** The long term future for the Nicholson's MSCP is being re-considered as part of a wider town centre redevelopment scheme and is likely to result in the re-provision of the existing car park, the Pay and Display equipment currently deployed in this car park will be able to be re-used in other RBWM car parks if

an entirely new car park is built or the current one is extensively refurbished and it is proposed that a Pay on Foot or Pay on Exit system is the preferred solution.

- 2.6 The cost to replace the former Pay on Foot system with a Pay and Display one was significantly less than a like for like replacement. In addition to the initial capital costs the ongoing operational equipment costs for the Pay and Display system are lower than those for a stand alone Pay on Foot or Pay on Exit system.

### 3. **SUPPORTING INFORMATION**

#### 3.1 **TERMS OF REFERENCE**

A Terms of Reference (ToR) for the review was prepared in early June following a request from the Leader of the Council for a review of parking controls systems. Subsequent to this request a Public Petition was received by Cllr Burbage which he presented to Council on 26<sup>th</sup> June, signed by over 2760 shoppers, traders and town centre users which was co-ordinated by Richard Manders - Managing Director of Beds are Uzzz - a town centre based business.

The Objectives of the Review were to:-

- examine the Strength and Weakness of Pay and Display (P+D) and Pay on Foot (PoF) or Pay on Exit (PoE) operations.
- examine and compare the types of parking systems in use in adjacent Towns and Boroughs.
- examine examples of where changing from one type of system to another have been implemented and consider lessons learnt.
- examine and review best practice.
- achieve a strategic approach to parking policy and changes across on-street, surface and multi-storey car parks which is seen by users to support their needs, that of the local economy and recognising Council's own budgetary needs.

#### 3.2 **BACKGROUND**

- 3.3.1 Historically RBWM has operated and managed the Borough owned car parks through a mixed set of control equipment systems, including P+D, PoF, PoE. Over the last ten years all of the Borough's MSCPs (Victoria Street, Stafferton Way, Hines Meadow and Nicholson's have had their method of payment system changed from either PoF or PoE to P+D. These changes have taken place as existing equipment reached the end of its economic or effective working life and needed to be replaced to ensure a reliable and cost effective system was maintained. (Approximate dates of change over for the other sites are:- Victoria MSCP February/March 1998, Stafferton Way MSCP April 2002, Hines Meadow MSCP March 2005 (to coincide with the start of Sainsbury's scheme). In addition Windsor Leisure Centre was changed from a mixed scenario which included P+D, PoE and PoF (a shared system) to a single P+D system in April 2000. Windsor Dials (public use at the weekends) was changed to P+D from PoE in early 2008 as the PoE equipment had passed its economic operation and was causing increasing problems for users and costs for RBWM.

- 3.3.2 Systems have been changed to P+D over a long period of time but the Nicholson's MSCP change in March 2008, was the last site to migrate to P+D. This has meant that the Borough now only has P+D systems and this single system approach helps with operational management, maintenance and support, running costs and flexibility of management keeping machines operational.
- 3.3.3 The main and general Advantages and Disadvantages of the different control systems are compared in Appendix A. Different systems offer different benefits and there are no simple, hard and fast rules to use when deciding which system to adopt. Generally each site needs to be considered in its own right and the specific issues which each site has -to inform the selection made. Each system also has its own disadvantages.
- 3.3.4 There are a number of specific reasons which are relevant to changes made to individual RBWM car parks:-

At Victoria Street MSCP, P+D was identified as the preferred choice partly due to the size of the car park (206 spaces) and partly due to the congestion that was caused by vehicles queuing to exit as a result of the design and circulation routes within the car park, when this car park was a Pay on Foot system.

In Stafferton Way MSCP a very high proportion of users (98%) are long term, generally all day parkers. To reflect this site's location and intended use there are only 2 tariffs available (one which provides for all day use and an off peak evening tariff after 7pm). P+D is therefore the simplest system to operate and use for this site.

In Hines Meadow MSCP (which was refurbished as part of the Sainsbury's redevelopment scheme) P+D was introduced as it enabled Sainsbury's users to obtain a voucher for the refund of parking which the store wanted to offer its shoppers, and it also enabled the car park to be easily separated into long and short stay designated areas which operated different daily tariff rates. This was done to ensure short stay users only were parking close to the store entrances.

Prior to the changes, Windsor LC operated a mixed set of systems in part as a legacy from its days as Windsor Leisure Pool, when the total available parking spaces was less, and the site was controlled so as to provide preferential rates for leisure users and discourage longer term town centre related use. As the site was extended and new facilities added, the car park was expanded, a simplified and single P+D method was adopted, whereby the tariff structure provided the controls to avoid long stay use, and refunds were offered to Leisure Centre users.

### **3,4 Nicholson's MSCP – Changes**

In Nicholson's MSCP, P+D was introduced after a number of factors were considered. The key issues were:-

a. Ticket Failures: Significant numbers (3 or 4 per week) of users became trapped in the car park in the late evening (when the car park is unmanned) due to the tickets collected on entry, becoming damaged and no longer being able to be read by the pay on foot machines (known as 'read fail' tickets). This resulted in customers having to call the Control Room so that a mobile team could be contacted to attend to release them. Customers were required to wait in the car park until the arrival of a member of staff, this could take up to 20 minutes. If the customer was trying to exit the car park after the mobile team have gone off duty, this call out could be longer as a standby 'duty officer' would need to be mobilised, typically from home.

b. Congestion Reduction: Traffic congestion results on the Broadway due to the time taken to enter and exit the car park. The current Broadway configuration of the one

way street in relation to the entrance and exit of the car park, means that when the car park reaches capacity, or if entry becomes blocked (eg equipment failure) the traffic either trying to get into the car park and or down Broadway, quickly backs up to block the exit from the car park. This design means that car park users become log jammed in and this as well as the vehicles jammed in the Broadway contribute to the poor air quality in the area. (The Broadway is the centre for one of only two Air Quality Management Zones in RBWM). Speeding up the entry system (albeit there is still a barrier and count system in place) reduces the likelihood of the entry to the car park being a cause of the congestion, for most periods of the operation. The reduced congestion will positively help towards the improvement of overall Air Quality in the area.

c. Advantage Opportunities: A very large proportion of users (approximately 75% historically) stay for less than 2 hours, therefore changing to P+D should have limited detrimental effect on these users, however it would have a potential beneficial effect in that it would become possible to offer the options to introduce a discounted tariff through the Advantage Card system (not previously possible through PoF system). Due to the very high number of Advantage Cards in circulation which operate with the existing P+D machines it was not considered viable to introduce an alternative 'resident card' for operation in a different parking system.

d. Future of the Car Park: At the time the equipment needed to be replaced, the long term future of the car park was uncertain, largely due to the age of the construction and the potential for redevelopment that had been muted in recent years, at that time in connection with the Nicholson Centre potential development plans (2006).

The usage patterns in this car park were also considered as part of the decision, the vast majority of users falling into either short stay or long stay categories. The large majority of users being short stay parkers, either staying only up to one or two hours, or being season ticket holders (approx 5%) staying long term (all day) and associated with the nearby office or retail developments.

e. The Only Non Pay and Display site: When the final decisions to proceed with replacement of the PoF system were taken consideration was given to the site being the only non Pay and Display site within the Borough operated and managed car park where charges apply.

f. The cost of replacement equipment: The overall costs of replacing the PoF system was considered in terms of both the initial capital procurement and the ongoing revenue costs. The initial overall capital costs of a PoF system were higher than the overall costs for change over to P+D. In addition the ongoing revenue costs of adding a number of extra P+D machines to the existing maintenance and support contracts was lower that a stand alone contract specifically for a PoF system. There were also benefits in terms of flexibility by using more of the same machines rather than having to hold spares for a stand alone system. The overall cost of a P+D system was therefore lower than a PoF system. The estimated difference in capital cost at the time the options was being considered was £175K for PoF vs. £125K for the P+D option.

In addition to these considerations, there was also considered to be a positive benefit from a change over to P+D that results from the increased frequency of patrols. The level of crime and the fear of crime are reduced as Parking Officers patrol the car parks more frequently, and resources are less tied to the exit area monitoring exit equipment.

### 3.5 Other examples of parking systems in the local area

Whilst it is difficult to compare Maidenhead or Windsor directly to a specific other town in the local area, users of RBWM car parks do make comparisons with their shopping experiences elsewhere. In the surrounding area there are a number of towns which offer different shopping experiences and different parking control systems. There are no simple 'rules of thumb' about which sort of system is used in which sort of car park, however, generally there is a mixture of systems in use in many of the local towns. These are set out in Appendix C.

If Multi Storey Car Parks only are considered there is a higher proportion of these car parks that use Pay on Foot or Pay on Exit systems, rather than Pay and Display. The Multi storey shoppers car parks tend to have PoE or PoF systems.

A number of other Councils have considered changes to the method of payment system in their car parks. From the research undertaken in connection with this review it appears that Winchester City Council have recently discussed reverting a Winchester car park back to P+D following it being changed to PoF approximately five years ago. The Council's main argument for reverting to P+D is that the PoF equipment is not as reliable as the P+D equipment used elsewhere, and that due to the design and location of the car parks considerable traffic congestion was caused. East Herts Council have recently been discussing whether their Bircherley Green car park should become PoF, however the Council's consultants advised that due to the size and layout of the car park changing to PoF would be costly, would result in the loss of spaces as spaces would need to be lost, due to changes to the entry and exit lanes. As a result tariffs would require an increase if the income levels were to be sustained.

### 3.6 The impact of changing to Pay and Display on usage

During the first six months of operation in the period from the introduction of P+D in early March 2008, there has been little change in the profile of daily paying users. A summary analysis of parking stay lengths both before changing to P+D and after changing to P+D is shown in Appendix B.

This usage indicates that although there has been considerable feedback to the Council about the change, the actual patterns of use have not changed significantly. The introduction of a revised tariff with effect from 15<sup>th</sup> September, whereby a new 'up to 4 hour' charge has been set for £2 has been designed to offer users the opportunity to double their available parking time for only 50p or 40 p more than the up to 2 hour charge.

## 4 Relevant National/Regional Guidance

No national or regional guidance exists that could be considered to provide a guide to Best Practise. However the British Parking Association advises that Local Authorities should consider payment method options and decide the method that best suits the Local Authority's and users requirements. They suggest a number of criteria that should be considered which include, enforcement methods, customer requirements, traffic flows, discounted parking requirements, and equipment costs.

Comparisons – Pay on Foot, Pay on Exit and Pay and Display Systems

<b>Feature</b>	<b>Pay on Foot (PoF)</b>	<b>Pay on Exit (PoE)</b>	<b>Pay and Display (P+D)</b>
<b><i>Evasion of Payment</i></b>	All users will have to pay prior to exiting the car park.	All users will have to pay prior to exiting the car park.	Customers could evade paying for their parking, but run the risk of receiving a PCN if caught. .
<b><i>Revenue from Penalty and excess charges</i></b>	No as customers only pay on return to vehicles when leaving	No as customers only pay on return to vehicles when leaving	Yes – if customers decide not to P+D, or over stay their paid time and the grace period allowed before PCN is issued.
<b><i>Customers having to return to vehicles at a set time</i></b>	Customers can stay as long as they wish (excluding any car park closing times that may exist).	Customers can stay as long as they wish (excluding any car park closing times that may exist).	Customers have to return to their vehicles at a set time, which they must decide on at the time of parking and purchasing their ticket, or return to their vehicle to purchase additional parking time.
<b><i>Traffic flow</i></b>	The entry and exit times at the car park are increased but are faster than Pay on Exit systems. Queues onto main roads can be a problem as a result of the slower entry rates at busy times, when the car park entry barrier is located close to the exit from the highway.	The entry and exit times at the car park are increased. Queues can develop back onto main roads where entry barrier system is located close to the exit from the highway.	There is no impediment of traffic flow at entry unless the car park becomes full. Numbers in the car park can be controlled by barriers operated on entry and exit counts, only slowing traffic when approaching capacity. Should reduce congestion on the highway due to faster entry arrangements.
<b><i>Discounted parking by shops, theatre etc</i></b>	Potentially available by the use of validating device which would be leased from car park operators. Not all PoF Systems have remote validation options.		Reminder portion of the ticket could be used to provide a discount against parking costs.
<b><i>Power failure</i></b>	Limited manual operation available due to the need for barriers to be operated in response to validated tickets, limited scope for battery operated back ups. Can result in possible revenue loss if power failures are over any length of time.	Limited manual operation available due to the need for barriers to be operated in response to validated tickets, limited scope for battery operated back ups. Can result in possible revenue loss if power failures are over any length of time.	Latest machines will operate for approximately 1-2 (or more) weeks on battery only. No revenue loss.
<b><i>Equipment failure or down time due to servicing</i></b>	A minimum 2 entry lane, 2 exit lane system with 2 or more pay stations will be able to operate, in the event equipments fails, albeit at limited capacity. There would be reduced traffic flow during the servicing or failure of a lane. A single entry/exit system is equipment critical at the entry and exit points, and not normally designed.	A minimum 2 entry lane, 2 exit lane system with 2 or more pay stations will be able to operate, in the event equipments fails, albeit at limited capacity. There would be reduced traffic flow during the servicing or failure of a lane. A single entry/exit system is equipment critical at the entry and exit points, and not normally designed.	Customers would have to use another pay station machine (provided more than one machine in the car park) and would therefore be inconvenienced, but still able to purchase ticket. Generally no impairment of traffic flow.

Feature	Pay on Foot (PoF)	Pay on Exit (PoE)	Pay and Display (P+D)
<b>Staffing</b>	A member of staff is required to monitor the system and operate the customers 'help' intercom. It is possible to operate the site remotely but problems can occur if an attendant is not on site within a few minutes. This is especially true at peak times.	A member of staff is required to monitor the system and operate the customers 'help' intercom. It is possible to operate the site remotely but problems can occur if an attendant is not on site within a few minutes. This is especially true at peak times.	Provided the machine has tickets and the cash boxes are not full, the system could operate with the absence of staff. Effective patrol/enforcement is important but not essential in the short term to maintain revenues.
<b>Convenience</b>	Provided the pay stations are positioned in suitable walkways, customers do not have to walk any additional distance en route back to vehicle. No requirement to make a repeat visit to their vehicle to extend display a ticket.	Payment made on exit from car park, means that no additional walking required to or from pay stations.	Customers have to purchase their ticket and then return to their vehicle to display the ticket. Customers must decide at the time of parking how long they wish to park for and purchase that period within the prevailing tariff.
<b>Friendliness</b>	Customers do not receive penalty charges. Customers can be under pressure at the exit barrier if they are not able to offer or insert a valid ticket although modern system can incorporate credit card payment options via help function at exit point. Queues can quickly form if lanes become blocked.	Customers do not receive penalty charges. Customers can be under pressure at the exit barrier if they are not able to offer or insert a valid ticket. Some POE systems can include credit card payment so avoid need for cash. Queues can quickly form if exit lanes become blocked.	Penalty charges are issued for over stays, and failure to P+D.
<b>Security</b>	Thieves would have to bring a vehicle into the car park in order to obtain a parking card to exit with a stolen car, or pay lost card fee. Entry and exit points are excellent points to view a static vehicle driver with C.C.T.V.	Thieves would have to bring a vehicle into the car park in order to obtain a parking card to exit with a stolen car, or pay lost card fee. Entry and exit points are excellent points to view a static vehicle driver with C.C.T.V.	Patrolling Enforcement Officers provide high profile reassurance to customers, and deterrent to criminal operators.
<b>Change giving</b>	Yes – modern machines generally incorporate change givers in all pay stations.	Yes – modern machines generally incorporate change givers in all pay stations.	Not built in to pay stations but separate change machines can be included to provide change options.
<b>Vandalism</b>	Barriers are susceptible to vandalism and accidental damage. Significant revenue loss may happen if pay equipment or barrier arms are damaged.	Barriers are susceptible to vandalism and accidental damage. Significant revenue loss may happen if pay equipment or barrier arms are damaged.	Pay and Display machines can be attacked. If there is more than one machine in the car park then there is no reason for revenue loss unless there was a series of attacks.
<b>Maintenance Cost</b>	Unless operators have their own maintenance staff the service costs for Pay on Foot system are often two or three times that for a Pay and Display car park. Out of hours, weekend cover is likely to be required.	Unless operators have their own maintenance staff the service costs for Pay on Foot system are often higher than for a Pay and Display car park. Out of hours, weekend cover is likely to be required.	Generally lower maintenance cost. Attendants can rectify significant amount of faults. Car parks with more than one machine do not require weekend and out of hours cover.

## Appendix B

NICHOLSONS MSCP – Profile of Users		
	Pre March 2008 Changes	March – September 2008
up to 2 hours	74.00%	77.00%
up to 3 hours	13.00%	12.80%
up to 4 hours	5.40%	4.20%
up to 5 hours	1.50%	1.30%
over 5 hours	5.40%	4.70%

For comparison purposes the Hines Meadow MSCP use is shown below. The revised Hines Meadow MSCP opened on 15<sup>th</sup> December 2007 when the Sainsbury's redevelopment opened.

Hines Meadow MSCP Profile of Users			
	2008/09 to date	2007/08	2006/07
up to 2 hours	76	75	67
up to 3 hours	5	7	9
up to 4 hours	1.5	2	4
up to 5 hours	6.7		
over 5 hours		7	12
Evening	9	9	8

**Appendix C**

**Key Multi-Storey Car Parks - Summary of Payment Systems used in adjacent towns**

**Reading**

Broad Street Mall – Pay on Foot  
Oracle - Pay on Foot  
Queens Road – Pay on Foot  
Civic Centre – Pay and Display  
Chatham Place – Pay on Exit

**High Wycombe**

Easton Street – Pay on Foot  
Wycombe Swan – Pay and Display

**Staines**

Elmsleigh MSCP and Surface Car Park – Pay on Foot  
Tothill MSCP – Pay and Display

**Bracknell**

Princess Square – Pay on Foot  
Charles Square – Pay on Exit  
High Street MSCP – Pay on Exit

**Slough**

Brunel Car Park – Pay and Display  
Herschel Multi Storey – Pay and Display  
Hatfield Multi Storey – Pay and Display  
Observatory (private) – Pay on Foot  
Queensmere (private) – Pay on Foot

**Wokingham**

No MSCPs all surface car parks operate Pay and Display System

Background Papers:

Terms of Reference  
Report to September Cabinet 2008 in response to Petition received