

HIGH PEAK BOROUGH COUNCIL

The Executive

4 December 2019

TITLE:	Car Parking: Pay and Display Machine Upgrades
EXECUTIVE COUNCILLOR:	Councillor Damien Greenhalgh – Executive Councillor for Regeneration, Tourism and Leisure
CONTACT OFFICER:	Katy Webster - Head of Assets
WARDS INVOLVED:	Various

1. Reason for the Report

- 1.1 The purpose of the report is to consider the options around replacing and upgrading the pay and display machines across the Council's income producing car parks.

2. Recommendation

- 2.1 It is recommended that the Executive approves:

- The plans to renew all 31 of the pay and display parking machines in the Council's off street car parks in the next financial year 2020/21.
- That pay and display machines will have both coin and card payment options and will remove the need for customers to input their car registration details.
- A capital budget of circa £150,000-£170,000 for the project.
- Authority to agree the contractual position with the procured supplier regarding the purchase, installation and ongoing maintenance of the machines is delegated to the Executive Director of Transformation and Chief Finance Officer.
- Authority to agree changes to additional connected contracts to facilitate the implementation of the machines is delegated to the Executive Director of Transformation and Chief Finance Officer.

3. Executive Summary

- 3.1 The Council's off-street car parks are an important provision for residents and visitors and the experience of using the service can leave a lasting impression.
- 3.2 The Council operates 24 off-street car parks – 6 free and 18 chargeable - with a

total of 1,952 parking bays in the borough. Annual income from the car parks (excluding Penalty Charge Notice income and a management contribution from Derbyshire County Council) was £1,158,000 in 2018/19 which then makes a contribution to support and other indirect costs after direct costs of £782,000 have been applied.

- 3.3 The Council's 31 coin only pay and display machines that serve the off-street car parks are now 15 years old. The technology used in these machines is some way behind the modern payment technology and user functionality now available on the market. The Council regularly deals with complaints from customers centred around the lack of cashless payment options and change is not given from the machines. Further feedback has suggested the removal of the need to input vehicle registrations into machines, thus allowing parking tickets to become transferable.
- 3.4 The Council's incumbent ticket machine supplier is Metric and they also supply the Council's neighbouring boroughs in Derbyshire and Staffordshire. Officers have had informal discussions with Metric about the options and costs for updating the machines to accept cashless payments. Metric have given indicative costs depending on the type of machines and the nature of the roll out.
- 3.5 Should the Council look to replace all 31 machines in the next financial year, indicative costs suggest a capital investment in the region of £150,000 - £170,000. This will depend on whether the Council can benefit from economies of scale in bulk ordering the machines with its strategic alliance partner, Staffordshire Moorlands District Council who are considering a similar report.
- 3.6 Adoption of cashless technologies should not yet be at the detriment of accepting coins too. Methods of paying by way of smart phone are also an option that is being considered by the County Parking Board as it has wider implications for methods of civil enforcement. Adoption of these payment methods have an impact on the cost of operating the service.
- 3.7 Should this report be approved, the next step will be to undertake due diligence to ensure that the Council is receiving value for money through its procurement procedures.

4. How this report links to Corporate Priorities

- 4.1 Included in aim three of the Corporate Plan is the objective of providing car parking to meet the needs of residents, visitors and businesses. Adoption of this report will start the process of improving the car parking facilities for motorists.

5. Alternative Options

- 5.1 Option 1: Replace with new, all 31 ticket machines in the next financial year 2020-2021. **Recommended.** This option would allow the Council to benefit from lower capital investment costs due to economies of scale. New machines would

lower the risk of machines breaking down resulting in reduced income and additional maintenance costs. Additional functionality of cashless technology will improve the customer experience and use of the car parks. There is a potential for lost income from overpayments as customers are likely to use a card rather than overpay and also increased costs of processing car payments.

- 5.2 Option 2: Not renew the existing machines. **Not Recommended.** New cashless technology could not be implemented. The existing requirement to enter registrations could be removed at an approximate cost of £12,400. Maintenance costs are likely to continue to increase year on year and the resulting loss of income to the Council. The machines are unlikely to meet the needs of residents, customers and visitors and therefore not meet the corporate objective as set out in section 4 above.
- 5.3 Option 3: Undertake a phased replacement over a three year period, targeting the busiest and highest grossing ticket machines first. **Not recommended.** The advantages are that a capital investment could be phased over three years, however additional costs would be encountered as the old machines would still require an upgrade and software configuration to remove the requirement for vehicle registration information. The Council would also not benefit from the economies of scale of bulk ordering machines with Staffordshire Moorlands District Council. The new machines have a different operating system, and although the instructions will be clearly highlighted on each machine, there may be confusion from the customers if they have to use different machines across the council car parks.

6. Implications

6.1 Community Safety - (Crime and Disorder Act 1998)

As the current pay and display machines accept cash only, any theft has a significant impact on income. Card payments will have the additional benefit of increased security.

New machines have added security benefits such as reinforced steel cashboxes and alarm systems that highlight when they have been a target for thieves.

6.2 Workforce

New machines will cut down on the maintenance and failure issues. Cashless payment methods will cut down on the number of customer complaints, this having a positive impact on the efficiency of the workforce.

6.3 Equality and Diversity/Equality Impact Assessment

None

6.4 Financial Considerations

Capital investment in the region of £150,000-£170,000.(Based on costs from the incumbent supplier) This will be included in the updated capital programme as part of the Medium Term Financial Plan

In terms of the impact on revenue, the additional costs associated with a cash/card payment machine option are estimated at £32,000 (as set out in paragraph 10.7) The additional costs relate to the fee incurred for accepting card payments, and an assumption on loss of overpayments (where the Council benefits from cash payments at times when people do not have the correct change). These additional costs may be offset by customers increasing the length of their stay if they have the options to pay by card as they are not restricted by the amount of change they have.

New machines are less likely to breakdown and therefore we anticipate that income of approximately £25,000 this year will not be lost. (See table 2).

6.5 Legal

This report seeks authority to enter into contracts for the purchase, installation and ongoing maintenance of car parking payment machines. The duty to procure public contracts in accordance with the Public Contracts Regulations 2015 and the Council's Contract Procedure Rules is recognised at paragraph 3.7 of the report.

6.6 Sustainability

Modern machines have negligible electricity use when on standby. Solar powered machines have been considered, however when the weather is poor and temperatures decrease in the winter, the machines use an internal heater to ensure that the tickets do not freeze. Frozen tickets will cause malfunctions. The heaters only function adequately when they have a direct electricity supply. Solar power only options do not necessarily generate the power to operate the heaters. Additionally the solar panels are an easy target for vandals, which again would render the machine useless.

6.7 Consultation

A number of Council services have been consulted and inputted into the report, including Parking, Finance and Transformation. There has been no public consultation on the types of machines to implement, but this could be considered before roll out.

6.8 Risk Assessment

As machines are replaced across the car park, there will be minimal disruption to customers, who will not be able to pay for parking on the days when the machines are not functioning. The replacement programme will be phased to minimise this disruption. If machines are replaced by incumbent supplier, each replacement should take less than a day to complete.

The user interface on any new machine will be different and habitual customers will need to get used to the changes. Information can be circulated in advance and the website updated. A communication strategy should be agreed in advance of changes.

Cashless technology requires GRSM SIM cards to be able to handle the

data transactions that operate via mobile telephone networks. It is vital that there is suitable signal strength in the ticket machines to be able to handle the data required to process the transactions. Prior to installation all the locations will be tested for adequate signal strength.

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**Web Links and
Background Papers**

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7. Background and Introduction

- 7.1 The Council's off-street car parks are an important provision for residents and visitors and the experience of using the service can leave a lasting impression. The car parks provide an important income stream for the Council.
- 7.2 The Council operates 24 off-street car parks – 6 free and 18 chargeable - with a total of 1,952 parking bays in the borough of which 1,652 spaces are pay and display. Customers are required to display either a valid permit or ticket during the hours of operation on chargeable car parks. Tickets can be purchased at the pay and display ticket machine that are located at each car park.
- 7.3 There are currently 31 coin only ticket machines that serve customers using the off-street car parks. The Council also manages a number of “on-street” parking machines on behalf of Derbyshire County Council. These machines are out of the scope of this report.
- 7.4 Table 1 below shows a summary of the last 4 years income, and costs and gross surplus on the car parks. (Surplus excludes any net income from civil enforcement across the car parks and is before any service support charges have been made).

Table 1: Car Park Income and Repair Costs (Off Street only)

	2018/19	2017/18	2016/17	2015/16
Machine Repair Costs	£3,297	£2,146	£3,503	£142
Net Costs (Enforcement & Recharges)	£376,000	£280,000	£267,000	£299,000
Income P&D	£1,158,000	£1,087,000	£1,115,000	£1,075,000
Surplus available to offset support costs	£782,000	£807,000	£848,000	£776,000

- 7.4 Most of the pay and display machines are now 15 years old and, as a result, have become unreliable which is resulting in increased repair and maintenance contract costs. When machines are not working visitors are not able to pay for their parking and car parks can not be enforced on, leading to a loss of income.
- 7.5 All of the current machines are manufactured, supplied and maintained by Metric. The dated nature of the equipment makes the machines more prone to mechanical issues and faults. These faults naturally impact on users and we would expect the number of issues to increase in future years. The cost of repairing the machines has been steadily increasing since 2016/17 and we expect that the cost of maintenance will increase again this year as the machines increase in age. The table below shows estimated figures of lost income per annum due to faults on the machines and the time it has taken to

repair them New machines should not incur as many faults and this lost income should be significantly reduced.

Table 2: Number of faults and estimated loss of income

	No of Faults	Days to Repair	Estimated income lost
2017/18	142	2.9	£38,900
2018/19	103	2	£20,660
2019/20 (estimated to date)	66	4.6	£25,690

- 7.6 Currently the pay and display machines allow cash only purchases and customers buy their ticket by depositing the correct value of coins into the machine (along with inputting the last 3 digits of the vehicle registration number first) which then dispenses the printed ticket for display. The machines do not provide change to the customer and the Council's income stream benefits to an estimated amount of £30,000 per year in overpayments.
- 7.7 Despite the operating instructions being displayed on the machines, the car registration keypads cause confusion and frustration for some customers and the Council has been asked to consider removing the keypads. The sole purpose of the system is to prevent tickets being transferred between vehicles.
- 7.8 Currently all the parking machines only accept coins as a method of payment. Officers continue to field complaints from customer regarding the limited and arguably outdated method of paying for car parking across the borough. This is particularly felt in the car parks that have a high percentage of visitor usage such as Castleton. Officers have received three complaints for Castleton Car Park alone within the last six months. Visitors from outside of the borough are used to a wide variety of ways to pay for car parking and the reliance completely on coins has brought criticism. With new car parking technology now available, more local authorities are using cashless payment technology.

8. Payment Options for Ticket Machines

- 8.1 Cashless technology is gaining pace across all areas of our lives, with various options being available to consumers. Over the last ten years we have seen major step changes in the provision of payment methods for parking. The traditional method of pay and display machines is still at the forefront due to user familiarity, however this has been supplemented by new methods of payments making the service more accessible, more cost effective and easier to use for customers and service providers. The new machines can now also carry a range of security and anti-fraud measures.
- 8.2 Pay and display providers now provide machines with 3 methods of payment:

- Cash: This is probably still the most popular payment method but machines can be prone to blockages. There are potentially upgrade costs when new coin is introduced. Most pay and display machines are unable to give change for over-payment. This method obviously has no issues with communication signal issues. Cash must be physically collected from the machines, counted and banked. The Council currently has a contract with BHPSS to undertake this service. This contract expires on 31st March 2020. Currently this contract costs £11,500 pa.
- Card - Chip and Pin / Dip: The Chip and Pin method requires the user to input their PIN number. Chip and Dip is where the card is put into the card reader and then taken straight back out (e.g. used on M6 toll) and this method is much faster. Chip and Dip can only be used up-to a value of £100 per transaction which may rule out season ticket purchases. The user only pays the advertised amount.
- Card – Contactless: Users present their card to the reader without having to touch the machine, with maximum transactions of up-to £30 currently allowed by the banks. The user only pays the advertised amount.

8.3 Transaction costs are involved in processing card payments. Based on the current fee structure set out in the banking contract, the cost of all car parking payments being processed by card would be £39,000. This is based on the average percentage transaction charge and admin charge of 4p per transaction. Additionally GRSM SIM cards are required in the machines that allow the data from the car payments to be sent via the mobile phone network. Adequate signal strength in the location is a critical factor for accepting the car payments.

8.4 Pay by Phone can be a convenient option for customers that do not carry cash and a simple way to receive transaction receipts for parking. Pay by Phone is easily accessible for disabled motorists, as payments are made remotely. Payments are recorded and well documented by Pay by Phone suppliers to gather hard data on usage levels to help inform decision-making regarding future tariff levels. It is also useful if the motorist uses the same car parks on a regular basis, as their last destination is usually stored in the system for convenience.

8.5 Pay by Phone reduces or eradicates queuing at machines at peak times. For users who do not have mobile data on their phone or mobile credit, this may be an issue. This system is reliant on the motorist having the correct App (such as Ringo and Pay-by-Phone) and having mobile data coverage on their phone from their provider.

8.6 The motorist is normally charged a convenience fee for paying by the App in addition to the parking charge, but this surcharge can be absorbed by the local authority on agreement with the Pay by Phone supplier. This is only a major issue when the tariffs are minimal; by example if a 50p tariff has a 20p surcharge for Pay by Phone. The main advantages are that cash collection is reduced and there is a reduced likelihood of vandalism or theft from the machines that hold less cash.

- 8.7 Phone apps normally require the customer to provide their personal information, such as their name, address, card payment details, mobile phone number and vehicle registration. In the event of the provider being hacked all the data can be used for identity fraud. The provider must be able to demonstrate that they have robust security levels.
- 8.8 Pay by phone options are being discussed at the county wide parking board. There are operational issues around the interface with parking enforcement services which would need to be implemented before any app could be adopted as the enforcement officers would need access to real time data. This option will be kept under review and subject to a further report back when discussions move forward.
- 8.9 Most pay and display machine manufacturers allow for the purchaser to configure the payment options to best suit the need of the customer. Therefore the Council has some control and options as to which methods of payment it provides.
- 8.10 Coin Only: The current machines are a coin only service. This option is not recommended as it does not solve the issue around customer's expectations of more modern technologies. However staying with coin only has the major advantage that the Council would not have to invest in the SIM and Software issues that are required to process card payments.
- 8.11 Card Only: Although some customers are happy to embrace cashless solutions, there are still large amounts of customers that would still require the option of paying by cash. The card only option would see a cost saving in that the cash collection service would no longer be required, however, each card transaction comes at a cost to the Council.
- 8.12 Pay by Phone Only: This solution is predicated on the fact that all customers will carry a smart phone and have access to the app for payment. It is unlikely that this will be a suitable option for all the customers visiting the car park and is likely to generate complaints from customers who do not have access to the technology.
- 8.13 Multifunctional machines allowing cash and card payment: This is the preferred option at the moment as customers will have the advantages of being able to choose their method of payment. Over time it is likely that more customers will utilise a cashless method of payment and we may be able to reduce the costs for the cash collection service, but the cost of processing card payments will increase. This can be reviewed on a regular basis as the back office software will provide this information.

9. Upgrading the Ticket Machines

- 9.1 The options of upgrading the existing machines to include cashless technology have been investigated with our existing provider Metric. Unfortunately the type and age of the Council's existing machines will not allow a retrospective refit.

Therefore the Council will need to purchase new machines if it wants to utilise cashless technology.

- 9.2 The procurement options for the replacement of the machines have been reviewed. The ESPO 509 framework has a number of providers and covers a wide variety of machines. Following a first stage review three manufacturers have been identified as the best value for money. Metric, our current provider shows best value for money.
- 9.3 Metric has provided indicative prices based on replacement of 62 machines, which is the total requirement for all machines across the High Peak Borough Council and Staffordshire Moorlands District Council strategic alliance. If the alliance places a bulk order of over 50 machines there is economies of scale of approximately £124 per machine.
- 9.4 Replacing all the machines at once would have a significant capital cost. Therefore the costs for a phased programme has been investigated. There are some additional difficulties with a phased programme targeting the main, highest value car parks in the first instance.
- Customer confusion as the machines would not be exactly the same across the car parks. Increase in service requests and complaints.
 - Potential to run two back office systems – inefficient use of officer time.
 - Cost to remove the keypads and reconfigure the machines to do away with the vehicle registration – approximately £400 per machine.
- 9.5 Option A: Purchase all new machines in install in the next financial year 2020-2021 following a procurement exercise to determine value for money. This would mean replacing all 31 HPBC machines at once. Indicative costs received from Metric place the total capital cost at **£148,240**
- 9.6 Option B: Adopt a phased programme, targeting machines of highest use in car parks that generate the highest levels of income first. This would include a review of the machines that are in the most urgent need of repair. It is suggested that approximately 11 machines would be replaced in phase 1, followed by a further 10 in 2021/22 and the remainder in 2022/23. The total capital cost over three years is **£160,040**. The increased cost is due to the costs of removing the key pads from the older machines and reconfiguring the software to remove the need to enter in licence registrations, as well as not benefitting from the economies of scale of bulk ordering a minimum of 50 machines.
- 9.7 Metric offer two types of machines that offer the functionality to accept both cash and card payments. The main differences between the two machines are the amount of tickets each machine will hold. The Elite has twin printers and can hold up to 8,000 ticket capacity. The Sprite version is a smaller narrow machine which only holds 4,000 tickets. Sprite is a cheaper option. The installation costs are the same for each type of machine. See Table 3 below.

Table 3: Capital Investment Cost

	Metric Elite LS (with twin printer capacity)	Metric Sprite
Purchase cost per machine (inc 12 month warranty)	£4,312	£3,748
Installation costs per machine	£470	£470
Total capital cost per machine	£4,782	£4,218
Total capital cost	£148,242	£130,758

10. Back Office – Software, Payments and Connectivity

- 10.1 Each machine connects to the back office software system by way of a SIM card, which runs off the mobile network. This allows officers to connect to each machine live to understand the status of that machine. Additionally the back office software “Aslan” gives live information about the tickets generated at from each machine. As the current machines operate coins only, the SIM cards to don’t have to process digital payment data.
- 10.2 Machines that take card payments have to have upgraded GPRS SIM cards as more data is sent across the mobile network to process the payments. The Council currently uses the EE Network, although testing will be required to ensure that this is sufficient signal strength in all locations to carry the data. If signal strength is an issue, then there is the potential to use “roaming SIMS” which will pick up the strongest mobile signal in that location. As some of the machines are in rural locations where signal strength is an issue, this testing will be a critical part of any replacement project.
- 10.3 In order for the Council to receive the income from any card or contactless payments, the machines must have PCI (Payment Card Industry) compliant software. Additional work will be required to ensure that the Council can accept card payments through its current software. Currently the Council pays a percentage cost to the card payment provider for each transaction. This is a percentage costs as well as a minimum 4p per transaction. These additional costs in proving the service are set out in Table 4 below.
- 10.4 Currently Metric supply the software package that allows the car parks officers to contact the machines. This is called WebAslan. As part of a machine upgrade, the software package will also be upgraded to MyOffice, hoisted by Metric. The upgrade would come at no cost to the Council, however there would be an annual charge per machine.
- 10.5 The ESPO framework will also allow the Council to procure a new ongoing maintenance package for the machines. There are various options available depending on the council’s requirements however we have adopted the silver package to show an indicative value. This is £326 per year and would be for a

fixed term of contract. This would not be needed in the first year as all the machines are sold with a 12 month warranty.

- 10.6 Other ongoing costs associated with the machines are the supply of paper tickets required for printing. The contract with the Council's current supplier expires in November 2019 and steps have been taken to extend this contract with the supplier in the short term until new machines can be adopted. At this point the Council will procure new ticket supplier. Current costs are approximately £6,000 per annum.
- 10.7 The cash from the machines is currently collected, sorted and banked by the Council's security contractor. The annual cost of this service is approximately £11,500. It is anticipated that as more transactions will be undertaken with cashless technology the need for cash collection will reduce over time.

Table 4: Ongoing Revenue Costs if card payments are adopted

Annual Cost based on 31 machines	Current Cost (Cash only)	Estimated Cost (100 % Card Payments)	Estimated Costs (Half Card Half Cash)
SIM costs	£4,460	£1,860	£1,860
Fee for Card Payments	£0	£39,000	£19,500
Software Hosting	£ 3,310	£2,980	£2,980
Maintenance cost (based on silver maintenance agreement)	£9,520	£10,110	£10,110
Supply of paper tickets (NAGELS)	£6,000	£6,000	£6,000
Loss of Overpayments Income	£0	£30,000	£15,000
Cash Collection BHPSS	£11,500	£0	£11,500
TOTAL	£34,790	£89,950	£66,950
Increase in costs		£55,160	£32,160