



# Arun District Car Park Study

Stage 2 Report - Policy Options and Recommendations

October 2024



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# 1. Introduction

Parking Matters Ltd (PML) have been commissioned by Arun District Council ('the Council' or ADC) to carry out a district wide off-street parking study.

This report considers the baseline work undertaken in Stage 1 and presents specific options available to the Council to help tackle problems identified in that report. We have tried to avoid reproducing large amounts of text or content from the Stage 1 report or third-party sources, so these are referred to within relevant sections.

We start with some national context to provide a basis for the options presented and recommendations.

## 1.1 Evidence Base – Why Parking Should be Managed

Car parking space is a finite resource. Private cars only spend an estimated 3-4% of their time in transit, with 80% of their time parked at home and the remaining 16% parked at a destination<sup>1</sup>.

A typical parking bay takes up around 12m<sup>2</sup> of space<sup>2</sup> and when circulation, entrances/exits and ramps are accounted for, this increases to around 23m<sup>2</sup> for surface car parks and over 32m<sup>2</sup> per space for multi-storey car parks. Meanwhile, towns and cities are getting denser<sup>3</sup>, putting more strain on parking availability.

Parking is also a valuable resource for residents and their visitors and an important part of supporting the vitality of towns and villages and their local economies. For local authorities, off-street parking is an important asset providing a tool for town centre management and revenue to deliver important services within the limits set out by national legislation<sup>4</sup>.

If the asset is poorly managed, car parking can have a detrimental impact on how towns and cities look and function, encouraging traffic, contributing to a poor townscape, and costing money to maintain. 'Cruising' for parking can generate vehicle mileage as users search for spaces, generating congestion and contributing to emissions<sup>5</sup>.

Figure 1 below illustrates these factors and how a Parking Strategy should work to achieve a balance between economy, townscape, income and sustainability.

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<sup>1</sup> RAC Foundation. July 2012. Spaced out: perspectives on parking policy

<http://www.racfoundation.org/research/mobility/spaced-out-perspectives-on-parking>

<sup>2</sup> Northern Ireland Government. May 2017. Parking Standards, General Considerations.

[https://www.planningni.gov.uk/index/policy/supplementary\\_guidance/spg\\_other/parking/parking\\_standards\\_considerations.htm](https://www.planningni.gov.uk/index/policy/supplementary_guidance/spg_other/parking/parking_standards_considerations.htm)

<sup>3</sup> Smith, Duncan. August 2015. The rebirth of Britain's inner cities, mapped.

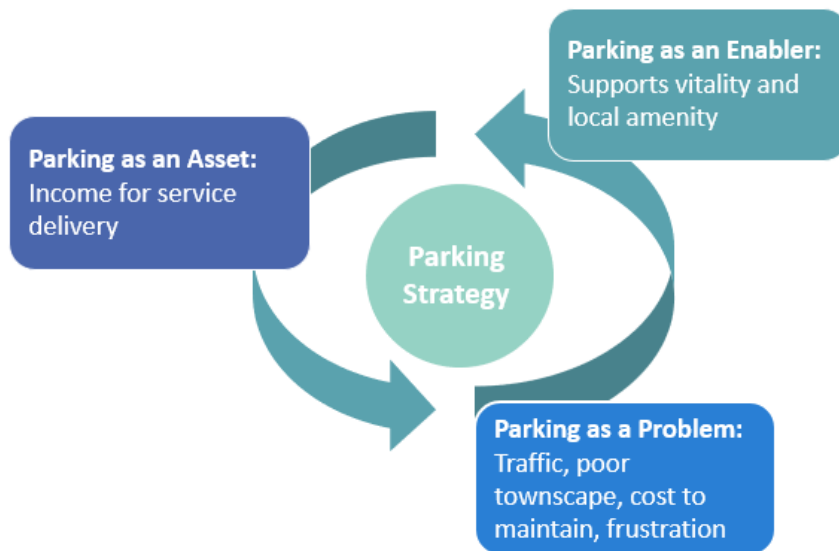
<http://www.citymetric.com/skylines/rebirth-britains-inner-cities-mapped-1356>

<sup>4</sup> British Parking Association. August 2011. Parking Practice Notes, p10.

<http://www.britishparking.co.uk/write/Documents/Library/ppns/PPN1%20-%20Charging%20for%20Parking%20-%20Aug%202011.pdf>

<sup>5</sup> Shoup, Donald. 2007. Cruising for Parking. <http://shoup.bol.ucla.edu/CruisingForParkingAccess.pdf>

Figure 1. How parking strategy should balance wider objectives



Societal and demographic changes, together with technological innovations, are transforming the way people work, spend their leisure time, travel and shop. Cars will increasingly be ‘connected’, and drivers will expect their car, or app, to find and pay for their parking automatically.

The expansion in the number of electric vehicles, connected cars and, longer-term, the introduction of autonomous vehicles will create both challenges and opportunities for parking services and transport managers. At the same time, the impact on the demand for both parking and parking services needs to be planned for in the context of a climate emergency and an urgent need to reduce the impact of cars and congestion on unacceptably high levels of air pollution.

The way that the public expects to pay for parking is also changing. In most instances, parking is a relatively small spend and, prior to the Covid-19 outbreak, cash remained the most common method of payment. However, the use of contactless payment in society has been growing quickly, spurred on by banks looking to optimise operational efficiencies and growing customer confidence in and familiarity with this technology. This, and the increasing popularity of apps such as Apple Pay, GPay, PayPal, etc. mean that drivers increasingly expect cashless solutions to pay for their parking. For the operator, cashless payments enhance operational efficiency, provide valuable data opportunities, and removes the potential for theft.

## 1.2 How Parking can impact and support districts and towns

Parking management is important to local communities, helping residents and visitors to access businesses and services and to support local economies.

Town centres are changing, changes in retail make the economic environment more challenging for retail-based town centres<sup>6</sup>.

Whilst parking charges are often raised by traders and businesses as a barrier to footfall and dwell time, the available evidence, such as that carried out by Mingardo et al. Erasmus University of Rotterdam<sup>7</sup> suggests a much less simple picture. Briefly, to summarise:

<sup>6</sup> Springboard. 2013. Re-Think! Parking on the High Street Report

<sup>7</sup> <https://www.eur.nl/en/upt/our-experts/giuliano-mingardo>

- BPA National Survey found that location and personal safety come before tariffs in what people value in parking.
- The UK based association of Town and City Management concluded that *“the general availability of spaces is felt to be more important than cost in their overall decision about visiting. Traffic flow and parking signage have as much, if not greater, effect on their decision to visit the town centre, how long they spend there, and how much money they spend.”*
- Where there is a link between footfall and parking, it tends to be that higher value destinations, with higher footfall, charge more not less, and that the general availability of spaces is felt by visitors to be more important than cost in their overall decision about visiting<sup>8</sup>;
- Parking is only one a whole number of factors that influence people’s decisions to visit a town centre, as shown in Figure 2, from the Re-Think! Report published by Springboard.

Figure 2: Factors influencing the success of a town centre (Re-Think! Parking on the High Street Report)



For a successful future, a district needs to attract visitors, shoppers and employers to its towns. Changing customer expectations and the changing role of technology provide both opportunities and threats, as connected vehicles help users to make more informed choices about their destinations, a well-managed, maintained and safe parking estate will help to do this.

Reducing car parking charges is unlikely to have positive effect on town centre performance on its own and brings with it negative aspects of a poorly managed parking estate without the desired uplift in visitors.

### 1.3 Climate Change and Air Quality

Carbon reduction targets will require parking policy and management to play a key role in delivering solutions to reduce emissions and to encourage the use of low emission vehicles. The change from a

<sup>8</sup> Atkins. The effect of Parking Policy in England: Stage 1 Final Report

carbon and car-based economy to a low carbon one is likely to see a change from car ownership to a car sharing model with mobility rather than ownership as the key. Changes are likely to occur gradually, and the Council must manage and facilitate the transition while maintaining and improving the economic vitality of the district.

The advantage of EVs is in improved local air quality and reduced road noise. However, they do nothing to tackle congestion, traffic severance, or reduce reliance on cars, and their global environmental performance depends on their manufacture and how the energy to power them is generated. Like conventional cars, EVs also emit particulates, this comes from brake, tyre, and road surface wear and with advances in cleaner engines, they now exceed exhaust emissions.

Forecasting future demand for electric vehicle charging stations in car parks is complex and difficult. EV technology is changing rapidly as car manufacturers try to improve the usability of their products. New designs have a greater range and use faster charging technology. There are other potentially disruptive technologies (in-road induction, hydrogen powered vehicles, etc) that will emerge over the next 10 years.

#### Wider Context - Summary

- High streets and town centres are changing across the country from retail centres to places where people want to live, work and enjoy. Parking has a role to play in this but is just one of a number of factors determining high street vitality.
- Changes in technology will play a significant role in how people decide on their destination, where they will choose to park and how they will pay for parking. Local authorities will need to respond to this change and to do so they will need to raise revenue to invest in new delivery models.
- Offering a variety of easy payment methods is essential for both the visitor experience and for an efficiently managed car park service.
- There is no strong or proven link between parking charges and footfall or retail vitality, the value of the space and strength of the destination are bigger factors in customer choice of destination. Whilst unreasonably high charges would obviously put visitors off, there is little evidence of this happening in the real world as parking operators of all types generally seek to find the optimum price.
- Evidence, although limited, suggests that if anything town centres benefit from reductions in traffic and that local customers walking or using public transport often spend more than car drivers in any case.
- Local authority car parks are not necessarily the optimum places for EV charging infrastructure and councils should carefully consider their placement and how ongoing revenue costs are to be met. Council car parks may have a role in helping charge vehicles in town centre locations where overnight off-street residential charging facilities are not readily available.

## 1.4 Summary of Stage 1

In summary the Stage 1 report discovered:

- The District is classified as Predominantly Urban by the ONS. It has a notably higher proportion of older residents over 65%.
- Travel to Work and Car Ownership Levels show slightly higher levels of car ownership and use than the England and Wales or South-East England Average.
- The retail performance of Bognor Regis and Littlehampton is reasonable and compares to coastal towns such as Weymouth, Wisbech, Margate, Scunthorpe and Bridlington according to the Harper Dennis Hobbs Retail Vitality Index (RVI).
- Arundel is not included in the RVI and has characteristics related to historical attractions and tourism.
- The West Sussex Local Transport Plan and Arun Local Plan and other policies have objectives to improve the quality and provide an appropriate level of parking across the district.
- The Off-Street Parking Strategy 2021-2026 provides a strategic framework for the study.

- Occupancy of Town centre car parks was very high on the survey days.
- Occupancy of seaside car parks was moderate but full on peak days in the high season.
- The Parking Disc scheme distorts the market and potentially shortens town centre visit lengths.
- Income levels by car park are lower than we would expect for the observed occupancy levels. This is likely to be due to the disc parking scheme.
- Income is **highly** seasonal.
- Tariffs are broadly in-line with other comparable towns and the local market conditions.
- Tariff structures require more detailed consideration.
- Season tickets for seaside car parks are heavily discounted compared to other towns.
- Sites are generally in good condition.



## 2. Benchmarking current service delivery

This section reviews the current compliance management service and draws on a database of performance data from across England held by PML. Authorities of a similar size and geography have been selected to make comparisons.

### 2.1 Current Operations

The Council is responsible for the management of off-street compliance in its own car parks. On-street compliance is managed by West Sussex County Council (WSSC). A single contractor is jointly employed by both councils to provide an on and off-street service.

The Council is responsible for providing the associated equipment and processes necessary to operate the service, including compliance management, pay and display machines and maintenance, provision of season tickets, parking place orders, consultations, business processing operations and issuing and processing parking software.

The Council has delegated the majority of these service elements to Marston's (as listed in the table below). Marston's is also responsible to WSSC for the compliance management of the on-street restrictions on the basis of a 70:30 split of deployed time.

The Parking Services team consists of a Parking Services Manager who manages the principal parking services officer, the appeal officer and penalty tribunal co-ordinator, the CPE appeals officer, and the Civil Enforcement Officer Supervisor.

The civil parking enforcement officer supervisor manages the contract with Marston's who provide a team of 12 civil enforcement officers and a parking engineer.

Processing of the PCN life cycle is managed by an in-house team, which reflects the general trend within the parking industry. Authorities have found that when outsourcing this element of the service the quality decreases which subsequently impacts the authorities' reputation. Having an in-house operation can also safeguard its independence in order to provide a fair appeals process to the customer.

The current contracts and requirements with the Council are summarised below.

Contract	Requirements	Service Provider
Compliance Management	CEO employment/deployment, first line machine maintenance, provision of hardware for compliance management	Marstons
Cash Collection	Cash collection of pay and display machines in car park	Marstons
P&D machine maintenance	Machine maintenance for pay and display machines	Marstons
Notice Processing	Administering life cycle of PCN, responding to correspondence, appeal management, scanning and provision of parking IT software	In house
Season Ticket	Processing applications of permit season tickets	MiPermit

### 2.2 Key Performance Indicators

4,683 off street PCNs were issued in the year 2022 with an income of £108,531 and 4,416 off street PCN were issued in the year 2023 with an income of £109,826.

KPIs are measurable values that demonstrate how effectively the service is achieving its key business objectives and which assist in identifying where beneficial changes can be made. KPIs drive innovation and are a continuous assessment of the service delivery. Whilst KPIs do not themselves deliver efficiency improvements or cost savings, they monitor performance and measure the impact of actions taken to drive efficiency.

The Council currently monitors performance on the following KPIs:

- Deployed hours; and
- Net PCNs issued.

In general, the KPIs are being met by Marstons. It is unusual to have a KPI which is in relation to the number of PCNs being issued. This is passed down from WSCC and should be removed.

It is important to monitor service providers to ensure that they are performing to the expected levels and are compliant with the specification. Regular compliance surveys should be undertaken to provide data on how effective the service is. We would recommend that the KPIs below are considered to be added to the KPI requirements.

Measurement Summary	Process and KPI
<b>Deployment Quality/efficiency</b>	- CEO error - CEO hourly productivity split between on and off street - CEO deployed hours split between on and off street
<b>Compliance with Parking Regulations</b>	The objective of parking enforcement is to improve compliance with the parking regulations and maintain this within tolerance levels. - Analysis of the compliance management operation through regular Compliance Surveys to give time-series survey data on compliance.

KPIs always require a two-way conversation with the supplier and be reasonable. The Council should discuss KPIs with the supplier and negotiate reasonable requirements from the current baseline.

### 2.3 Service delivery benchmarking

The statistics below are key indicators on how the service is performing. The data collated for the benchmarking exercise was gathered from comparable authorities through desktop research, including parking annual reports, web sites, policies and discussions. Statistics have been calculated by combining the PCN data for year 2022 and 2023.

PCN Statistical Benchmarks	Arun	Average
Discount recovery rates	65%	62%
Overall recovery rates	73%	73%
Cancelled CEO error	1%	0.5%
Hourly CEO productivity	0.84	0.8
Cancellation (not including write off) %	17%	16%
% of PCNs challenged	18%	24%
% Appeal to adjudicator (small sample)	0.03%	0.24%
% Appeal cases lost (small sample)	29%	56%

The table above indicates that the service is operating well, with recovery rates above average. Cancellations and CEO productivity rates are in line with expectations.

**The discount recovery rates** relate to the number of PCNs paid at the discounted rate and a higher rate suggests that PCNs were correctly issued. This is comparable to average.

**The overall recovery rate** relates to all PCNs paid. This is comparable to the average.

**Cancelled CEO error rate** includes only those PCNs issued in error, not those issued and then re-issued correctly. This is slightly above average, but not dramatically so. From discussion with the Council this is likely to be as a result of the confusing nomenclature of car parks (e.g. West Beach and West Green, and the confusing locations of Sea Road and The Wall). In another similar authority, a higher cancellation rate appeared to be a result of the disc parking scheme (with a high number cancelled for “having a valid disc”) given the difficulties in enforcing disc parking.

**The CEO productivity rate** relates to PCNs issued per CEO per hour. The CEO productivity rate is average compared to similar authorities.

The overall **level of PCNs cancelled** is 17% which is in line with the average level.

Finally, the number of cases that went to the adjudicator is so small as to make comparisons unreliable, but performance appears respectable.

## 2.4 Performance Summary

The current operation appears to be functioning well, although the KPIs should be updated. The service is largely built around the contract with West Sussex and so any major redesign of how it operates is dependent on this requirement. WSCC carried out a review in 2020 to consider the current relationship with district councils, but no changes were made.

Item	Common issues	ADC	Position
<b>No Annual Parking Report Produced</b>	Many Councils do not produce Annual Parking Reports.		ADC produces Annual Reports on-line
<b>Complicated, ad-hoc or expired contracts</b>	Ad-hoc or expired contracts are often used in place of a strategic approach to procurement.		ADC benefits from the WSCC on-street contract and has clear contractual arrangements with partners
<b>Inconsistent payment methods across the estate</b>	Equipment varies regarding payment methods allowed across the estate resulting in uneven and confusing customer experience.		P+D machines are consistent and allow the same payment methods across the estate.
<b>Inconsistent pay-by-phone between on and off-street in two-tier authority areas</b>	On-street and off-street pay-by-phone providers are different requiring two sets of service to be used by customers		Consistency between on and off-street through MiPermit between WSCC and ADC parking
<b>Inadequate equipment in car parks</b>	Old and out-dated equipment provides poor customer service (e.g. by only allowing coin payments in exact change), breaks often costing money to repair and/or loss revenue, and provides poor management information.		All machines have been replaced in the last few years and allow for card and contactless payments.
<b>Cash-only P+D parking or no card payment option</b>	Some authorities still only allow cash payments.		All car parks allow cashless and contactless parking payments.
<b>Separate systems to neighbouring authorities</b>	Whilst not always a problem, customers now expect a more joined-up approach to paying for parking through a preferred third party		Systems are the same as neighbouring authorities in the main
<b>Handheld systems do not link to back-office</b>	Handheld devices do not always connect with back-office systems requiring manual export and import of data		Handhelds and back-office systems are integrated.
<b>Provide data to open data feeds</b>	Data is hidden on web sites or behind mobile apps. In reality this means that is seen by a small number of customers.		Connected vehicles and apps need to be able to communicate in real time with information on parking availability and price.

## 2.5 Options for Service Delivery

The main consideration for the Council is whether to continue to outsource the compliance management service or whether to bring this inhouse.

As well as our many years of working with local authorities, private parking operators, and parking enforcement suppliers, we carried out a research exercise on delivery models in 2021 to advise a client in southern England. During this work we spoke to a number of local authorities in southern and south-western England including urban unitary authorities and larger rural counties.

When considering the high-level options for service delivery there are broadly, four models for service delivery currently deployed across the country:

- **In-house:** day-to-day delivery is entirely or largely delivered within the local authority by directly employed staff.
- **Contracted:** day-to-day delivery is entirely or largely delivered by a contractor appointed by a local authority.
- **Separate lots:** whereby large portions of the service are contracted separately.
- **Third Party Agreement:** whereby a third party, for example a neighbouring council (or even a JV company) is employed to carry out parking management and enforcement.

Across England most authorities either deliver services in-house or through a contract with a supplier. In the research we conducted, we found that most authorities made the decision on their delivery models at the point they adopted civil enforcement. There have been relatively few cases of wholesale change in delivery model, although there are a few recent examples which will be discussed in the following sections.

## 2.6 In-house delivery

We estimate around half of authorities deliver their parking services in-house including some of the country's largest cities (e.g. Newcastle and Bristol), counties (e.g. Devon), unitary authorities (e.g. Bath and NE Somerset and Swindon), and numerous districts (often off-street only).

This does not mean that all services are delivered in-house, but that the majority of the team, including the Civil Enforcement Officers are employed directly by the council.

Commonly cited strengths of this model are the direct and easy access to the civil enforcement service, the ability to direct and change the service to respond to policy changes and the shared services with other departments. However, poorly managed or resourced parking services can perform very badly with low PCN rates and high rates of PCN appeals. Where teams are poorly managed, authorities seem especially susceptible to high rates of sickness and absence.

Figure 3. In House SWOT Table

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Easy Access and influence.</li> <li>• Complete control over quality of delivery</li> <li>• Intimate understanding of the local area and authority</li> <li>• Ability to reach back into other council services</li> <li>• Intangible customer service benefits e.g. enforcement staff working for their own communities ('civic pride').</li> <li>• Staff can be redeployed to deal with other issues including litter, graffiti, blocked drains</li> <li>• Intangible benefit of having council representatives on the street.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Ongoing need for training and continued professional development often overlooked</li> <li>• Fewer economies of scale when purchasing equipment</li> <li>• Difficult to scale up or down</li> <li>• Corporate policies / priorities can reduce the efficiency and professionalism of the service</li> <li>• Slower to procure services and equipment</li> <li>• Slower to recruit and replace staff.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Some shared services or shared economies (e.g. CCTV, Cash Collection)</li> <li>• Better quality of delivery and customer service leading to reputational benefits</li> <li>• Branding and communications..</li> <li>• Overhead savings from use of other council departments and premises.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Corporate policies such as recruitment freezes or carte blanche cost-cutting</li> <li>• Senior salaries often lower than market rate;</li> <li>• Junior staff pay &amp; benefits often lead to higher costs</li> <li>• High sickness and vacancy rates</li> <li>• Inappropriate corporate projects (i.e. with software or corporate systems.</li> </ul>

Recently, some authorities have decided to bring their parking services back in-house, two examples are briefly discussed below.

**Hackney** made the decision to in-house its civil enforcement activities in November 2020. The objective was to improve the customer experience and improve the flexibility of the council to embrace new ways of working to improve the service. This included approximately 132 FTE staff covered under TUPE regulations with a transition period from Nov 2020 to March 2022. Fixed costs are expected to remain the same, with the main savings coming from the payments relating to Key Performance Indicators (KPIs).

**Buckinghamshire** brought all civil enforcement in-house following a new Unitary Council Buckinghamshire Council formed in April 2020. Prior to this, there were four district councils and one county council. The legacy county council operated an outsourced model for on-street parking restrictions, whereas the legacy district councils responsible for off-street operated in-house teams. The parking service in its entirety has operated in-house since autumn 2021 when the contract for the outsourced model expired. The council cited flexibility, simplicity and control over the service as the reasons for the change.

## 2.7 Contracted

Letting a contract for specialist services can be beneficial to parking services and provide managed, efficient, resilient and cost-effective solutions if the contract is well specified, the performance targets are achievable and fair, and internal contract management is consistently applied. Importantly, risk is transferred from the commissioning body.

Cost savings can arise from economies of scale as being part of a larger operation results in a pool of expertise which is kept up-to-date and can be deployed to other operations by the supplier. Private operators are often keen to adopt new technologies especially where these deliver efficiencies.

The most common method of operation is to let a large main contract, typically for a 5-year term and sometimes including break options and/or extensions, which encompasses all elements of the service. This requires careful specification (usually with assistance, if this is the first time such a contract is let), and an 'OJEU'-style tendering process. A client team will still be required to interface with councillors and suppliers as well as perform some duties which have to be considered by the Local Authority (second stage appeals). Any issues with staff retention or the recruitment of new staff to carry out these duties will impact this part of the service.

Figure 4. Outsourced SWOT table

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Pool of expertise to draw from which is kept well trained and knowledgeable</li> <li>• Economies of scale</li> <li>• Easier to scale up or down</li> <li>• Risk Transfer to provider</li> <li>• New services can be brought in quickly without large capital investment.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Although margins are low, a proportion of the price will be taken as profit</li> <li>• Pricing can be high for services out-of-contract</li> <li>• Sub-contracting carries a management fee</li> <li>• Intangible customer service implications resulting from staff employed by a third party.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Benefit from industry change and innovation</li> <li>• Adopt new technologies quicker</li> <li>• Quicker procurement and equipment renewal</li> <li>• Expertise and economies of scale for purchasing.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Poor contracts / procurement can lead to Inflexibility</li> <li>• Poor future proofing, post contract with knowledge loss a risk</li> <li>• Complicated ownership of assets (e.g. handheld devices)</li> <li>• Bankruptcy or insolvency.</li> </ul>

**Watford** is an example of an authority we have worked with who are very satisfied with the outsourced model. A well-resourced client team provides clear direction for the contract and a small, but skilled in-house team manages the contract. An example cited, of where the approach worked well, was around new parking arrangements around the football stadium where a partnership approach led to good outcomes.

## 2.8 Separate lots

Separate Lots, whereby the functions are split into multiple lots for procurement and letting separately, either at once, or staged to the market has been proposed in some places such as Hackney and Reading.

Some potential minor benefits potentially include competition between providers, and reduced management fees from the lead contractors.

Disadvantages include, little chance of economies of scale, compatibility and cooperation issues, separate tender process, reduced resilience, fewer savings during contract and union and staff relations.

Figure 5. Separate Lots SWOT Table

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Potential for greater flexibility</li> <li>• Easier to scale up or down</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Would still require a reasonably sized client team to manage the relationships</li> <li>• Pricing is likely to be higher as out-sourced operations will be smaller</li> <li>• Intangible customer service implications resulting fractured service delivery.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Potential competition between suppliers to be seen as more efficient</li> <li>• Benefit from industry change and innovation</li> <li>• Expertise and economies of scale for purchasing.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• More points of weakness and failure; a single contractor failing could impact the entire service</li> <li>• Compatibility and cooperation issues between suppliers</li> <li>• Poor future proofing, post contract with knowledge loss a risk</li> <li>• Complicated ownership of assets (e.g. handheld devices)</li> <li>• Union and staff relations.</li> </ul>

There are often suggestions to allow local and/or community interest organisations to bid for lots. This is likely to prove problematic because parking needs to conform to statutory guidance procedures and most functions require a detailed and up-to-date knowledge to comply with the law. A cooperative or similar organisation could be set up, but as far as we know, none have been to date.

Multiple lots will require increased management resource for the council and invite added complexity. Experience would suggest getting contractors to work together without the guidance of the commissioning authority is the key barrier to success for this type of contract.

## 2.9 Potential for Off- Street Lease Disposals

As part of the decision-making process for a potential procurement with multiple lots, the Council could consider granting leases of some or all of its off-street car parking sites to a private company to operate.

Other councils, notably Westminster have carried out similar exercises successfully. In 2008, Westminster Council's 14 car parks (4,000 spaces) were operated under a management contract, and it retained responsibility for commercial aspects including pricing and maintenance. Significant investment was required to modernise the car parks to optimise the value of the portfolio and safeguard an important annual revenue stream. Following an options appraisal, it was agreed that a leasing option would be most beneficial and financial proposals were sought for 25-year leases on a full repairing and insuring basis, including proposals for initial investment to upgrade the facilities. This yielded 300 expressions of interest from around the world and 11 proposals. Q-Park was selected as preferred bidder. In the years following the grant of the lease the council increased its annual net revenue by £2 million with a guaranteed inflation-proofed minimum revenue for the next 25 years. Q-Park invested £10 million to improve the quality of the facilities and the council was no longer liable for commercial and maintenance responsibilities.

Since this transaction occurred the off-street parking market has rationalised and some of the larger operators such as NCP have been heavily impacted by the pandemic so there may be limited



appetite for this type of transaction at the current time, particularly as the Council has a diverse off-street parking estate including some car parks that are operated at a deficit.

Lease transactions also attract Stamp Duty Land Tax, the payment of which will reduce the amount available to pay as rent to the Councils. Finally, the levels of return on capital required by private operators are likely to be higher than the borrowing rates available to the Council, therefore investment in the car park estate and technology is likely to be more expensive.

There are likely to be legal risks if the Council would like to control the level of parking charges in a lease agreement as it is likely (subject to specialist legal advice) that this will be in breach of the Competition Act 1988.

Figure 6. Off Street Leasing SWOT Table

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Provides fixed income stream</li> <li>• Can facilitate private investment in parking estate</li> <li>• Procurement process will be simpler as a property transaction rather than a service contract.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Council may lose control over tariffs, opening hours, concessions etc unless specified within the lease agreement.</li> <li>• No share in revenue growth unless agreed at the outset</li> <li>• Private sector profit margin will reduce amount paid to council</li> <li>• Very limited flexibility to allow for potential changes in the parking estate</li> <li>• Cost of stamp duty land tax.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Property transaction so potentially quick to legal completion.</li> <li>• Benefit from private sector expertise and innovation</li> <li>• Expertise and economies of scale for purchasing if investment is required...</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• More points of weakness and failure; a single contract failing could impact the entire service</li> <li>• Poor future proofing pots contract with knowledge loss a risk</li> <li>• Private sector companies have been financially impacted by Covid and are now less risk averse. Rents payable may be low to reflect this.</li> <li>• Private sector is unlikely to be interested in unprofitable car parks</li> <li>• TUPE may also deter some operators.</li> </ul>

It is extremely unlikely that the private sector would show interest in loss-making car parks unless there is potential to improve trading by increasing tariffs or removing restrictions. The Council could consider discussing transferring loss making facilities to town councils if this is an option. Disposal for alternative uses could also be explored.

**Cornwall County Council** has been considering plans to lease out some of its car parks as part of a cost-saving initiative. This includes transferring management of up to 50 of its council-owned car parks to other entities, such as town and parish councils or private companies through ownership transfer or leasing car parks to external providers. While there is no final agreed list of car parks to be transferred, the council is expected to release a named list in the autumn.<sup>9</sup>

It has been suggested that this could allow the use of ANPR cameras could help improve efficiency and revenue collection in managing parking spaces. However, as discussed in Section 5, councils are not allowed to issue PCNs through ANPR at present. A recent scrutiny committee meeting

<sup>9</sup> Concerns over plans to lease Cornwall Council owned car parks - BBC.  
<https://www.bbc.com/news/articles/c5ydwqxq1njo> .



recommended that council leader makes a devolution request to the government, seeking the power to use ANPR cameras<sup>10</sup>.

Through our work with the BPA, we understand that other local authorities are employing a 'wait and see' strategy as the question may be subject to complex legal definitions of what constitutes public land and under local authority control. Arun may wish to seek its own legal advice on this issue.

## 2.10 Third Party Agreement

Joint arrangements between local authorities are seen in the market e.g. the North Essex Parking Partnership (although this is in effect a department within Colchester Borough Council), and of course the current arrangements whereby WSCC and Arun use the same supplier to carry out on of off-street enforcement.

Figure 7. Third Party Agreements SWOT Table

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Potential for greater flexibility, but still retaining control</li> <li>• Easier to scale up or down than in-house and potentially contracted services too.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Limited by legislation around publicly controlled companies</li> <li>• Pricing could be higher than larger out-sourced operations by national providers</li> <li>• Set-up costs will be significant</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• If well managed, pool of expertise to draw from which is kept well trained and knowledgeable</li> <li>• Benefit from industry change and innovation</li> <li>• Quicker to respond to industry changes and technology.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• There may be no appropriate organisation willing or able to take on the role requiring a new company to be set up</li> <li>• Terms, conditions and staff team may remain in-house</li> <li>• If it involves more than one local authority, political and strategic differences could impact successful delivery</li> </ul>

A third-party arrangement can better create a critical mass and thus a higher level of interest from the market, in addition to encouraging economies of scale and realise some of the benefits of out-sourcing (expertise, cost control etc.).

In the case of Arun, the opportunity of working with other West Sussex districts to provide the services is worthy of close attention. This would in effect be an incremental evolution of the current two Council approach and brings benefits to a smaller operation in both front-line services and potentially client-side parking and contract management expertise. This approach could assist in providing a joined-up service, reducing costs and improving customer perception of the service.

<sup>10</sup> Cornwall Council warned about offloading up to 50 of its car parks. <https://www.cornish-times.co.uk/news/cornwall-council-warned-about-offloading-up-to-50-of-its-car-parks-718963>

## 2.11 Conclusions

The way that a service or contract is managed is more important than the delivery model. A well-resourced and well-run in-house service can be as efficient as a contracted service and offers the benefits of easy access and direct control. The benchmarking exercise detailed above suggests that the service performs relatively well compared to the benchmarking data available.

The benchmarking information suggests there is little reason to change the delivery model at the current time, but that digitisation and better information could improve enforcement efficiency.

<b>Service Delivery</b>	<b>Recommendation</b>
<b>Overall Service Delivery</b>	No overall clear case for changes to contracts or system. Team size is comparable to other districts with an on-street enforcement function.
<b>Key Performance Indicators</b>	The KPI in relation to the number of PCNs being issued should be removed by WSCC.
<b>Intelligence &amp; Monitoring</b>	Compliance surveys of off-street car parks should be carried out on an annual basis to ascertain the effectiveness of the enforcement operation.
<b>Digitisation</b>	Digitisation of services will enable better decision making.

### 3. Future Demand

As requested, we have carried out a forecasting exercise to provide an assessment of potential future demand over 15 years, to 2039 using the Department for Transport’s TEMPro traffic forecasting model<sup>11</sup>. TEMPro (Trip End Model Presentation Program) is the accepted industry standard for estimating traffic growth and is sponsored and maintained by the DfT and a consortium of the UK’s leading transport consultancies. The model takes account of population, housing, employment and car ownership to forecast traffic and trips. The data sources include historical planning data and a large number of annual traffic surveys taken across the UK. The model is used for a wide range of applications including Transport Assessments and business cases for transport investment and is used for strategic transport planning modelling across the country.

#### 3.1 Methodology

Given the number of factors at play and the potential for significant change over the next fifteen years, no forecast can be relied upon, and it is provided only as an illustration of how background growth in demand could impact demand. TEMPro is also calculated at the Middle Super Output Area level (MSOA) so the results for individual sites can only be viewed as a guide which demonstrates potential growth to inform the strategy with regards to future demand for off street parking.

Additionally in Arun, calculating an increase in demand for the highly seasonal car parks would be meaningless as the demand for these is more likely to be impacted by trends in holidays and breaks, the improvement in the offer, and the weather.

We have selected those Middle Super Output Areas which include the main car parks. TEMPro Reports the following Growth Factors in the settlements:

Figure 8. MSAOs selected in TEMPro

MSOA	Assigned to	Growth factor (attraction)
E01031391	Arundel	1.1112
E01031436	Bognor Regis	1.1183
E01031455	Littlehampton	1.1168

Considering these growth factors this would result in demand, expressed in percentage occupancy, as below. The low, medium and high columns relate to the three days of surveys carried out in August 2024 (i.e. rainy, cloudy, sunny).

Name	Town	Cap.	2024			2039			2024			2039		
			Low	Ave	High	Low	Ave.	High	Low	Ave.	High	Low	Ave.	High
Hothampton	Bognor	201	176	176	176	197	206	215	88%	88%	88%	98%	102%	107%
London Road	Bognor	98	22	22	34	25	31	38	22%	22%	35%	25%	32%	39%
Lyon Street	Bognor	61	53	53	61	59	64	68	87%	87%	100%	97%	104%	112%
Fitzleet	Bognor	343	76	76	109	85	103	122	22%	22%	32%	25%	30%	36%
Regis Centre	Bognor	175	86	86	112	96	111	125	49%	49%	64%	55%	63%	72%
Anchor Springs	Littlehampton	27	13	13	27	15	22	30	48%	48%	100%	54%	83%	112%
Manor House	Littlehampton	104	71	71	104	79	98	116	68%	68%	100%	76%	94%	112%
River Road	Littlehampton	19	9	9	17	10	15	19	47%	47%	89%	53%	76%	100%
Surrey Street	Littlehampton	43	26	26	32	29	32	36	60%	60%	74%	68%	75%	83%
St Martins	Littlehampton	235	102	102	147	114	139	164	43%	43%	63%	48%	59%	70%
Crown Yard	Arundel	64	32	32	64	36	53	71	50%	50%	100%	56%	83%	111%

<sup>11</sup> TEMPRO, V72, 2019

Town-wide, this equals:

Town	Cap.	2024			2039			2024			2039		
		Low	Ave	High	Low	Ave.	High	Low	Ave.	High	Low	Ave.	High
Bognor	878	433	456	479	484	510	536	49%	52%	55%	55%	58%	61%
Bognor (No MSCP)	535	433	456	479	484	510	536	81%	85%	90%	91%	95%	100%
Littlehampton	428	269	278	286	300	310	319	63%	65%	67%	70%	72%	75%

### 3.2 Conclusions

We consider anything over 80% to be ‘full’ when churn and manoeuvring is considered. Many sites already exceed this. The 15-year future model highlights a number of sites where demand would exceed 100% of capacity. When considered at the town level, demand in Littlehampton runs the risk of exceeding supply. This is not the case in Bognor, but only because of the capacity available in Fitzleet MSCP. If the MSCP is removed from the model, then it reaches 100% in 2039.

Crown Yard in Arundel is already full at peak times and the model suggests this could be exacerbated in the future. Logically, demand would dissipate to the Lido, Castle and the already pressured free on-street parking.

It must be noted that TEMPro has been found to over-estimate growth in the past<sup>12</sup>. Although it remains the ‘best available’ tool for modelling growth within the industry.

### 3.3 Dealing with demand growth

Options to cater for future growth include improving the look and feel of Fitzleet MSCP to make it fit for the future and, in the next decade or so, considering adding a deck to St Martins in Littlehampton. There is no obvious location for increasing capacity in Arundel.

Future Demand	Recommendations
<b>Bognor Regis</b>	Retention and aesthetic improvement to Fitzleet MSCP including potential improvements to the façade, improvements to the exit ramp, and reducing the number of bays between columns to enlarge spaces.
<b>Littlehampton</b>	Potential decking St Martins in the far future (10years+) subject to feasibility.
<b>Digitalisation</b>	Digitalise the service to provide better information about supply and demand.

<sup>12</sup>

<https://tps.org.uk/public/downloads/Wwac7/An%20Investigation%20into%20TEMPro%20Growth%20Factors%20-%20best%20paper%20by%20Hannah%20Clark.pdf>

## 4. Technology Options

Over the next 10-15 years there will be significant changes in the functionality of vehicles as well as the manner in which customers will find, access and pay for parking. These changes are likely to occur in three time periods (years are approximate - see note on vehicle age below<sup>13</sup>).

### 4.1 Parking Technology Trends since 2020

The main trend in parking technology in the public sector is towards cashless and digitisation – the ability of systems to record and share data whilst removing the need for manual processes. The resulting digital systems have a number of benefits to customers and operators:

1. Maintaining detailed records of all on and/or off-street parking locations, parking space information, restrictions and tariffs are held digitally, enabling accurate information on parking to be shared online with customers.
2. Customers can interact with the parking service via websites and smartphone apps, reducing the time taken to purchase, apply for or renew “parking sessions and permissions” , as well as reducing the administration burden for operators.
3. The details of all parking sessions, permits etc are recorded centrally and linked to vehicles’ licence plates. This enables:
  - an accurate picture of parking availability to be compiled and shared with customers.
  - a single source of information for enforcement purposes that can be used with a range of monitoring devices (handheld units, fixed and mobile ANPR). Enforcement can be mobilised more easily, covering a wider area with fewer resources.
  - Data to be collected to inform parking strategy and to monitor the impact of tariff changes in the district.

Standards for the communication of parking data are currently provided by the Alliance for Parking Data Standards (APDS), which is also the basis of an ISO and CEN standard (ISO Technical Specification [ISO/TS 5206-1] and the revision of the CEN Technical Specification [CEN/TS 16157-6]). In order for the compliance management systems to interact effectively with vehicles, apps and payment systems, technology must be able to communicate using these standards. Compliance with APDS standards and interfaces should therefore be an essential requirement in any procurement.

### 4.2 The Development of the National Parking Platform

The National Parking Platform (NPP) is a major publicly-owned initiative funded by the Department for Transport. It is open to public and private parking operators and service providers.

The NPP manages data exchange between systems and is based on APDS.

The NPP makes parking data available to the customer via third-party Service Provider apps. Car parks and on-street parking areas that supply data to the NPP have enhanced “digital visibility” which gives them an important commercial and competitive advantage. On-street authorities will be

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<sup>13</sup> Currently, the average age of a UK car is approximately 8 years (see SMMT 2017 Automotive Sustainability Report). This is taken into account in our forecasts, for example it is likely there will not be significant numbers of connected vehicles until the end of the first period and they will only form the majority from 2025. However, Government policy (for example on emissions) may result in scrappage schemes or other incentives to purchase electric vehicles. This would significantly increase the rate of market penetration for the other features described.

able to increase the efficiency of their operations, provide a better service and reduce the cost of compliance management.

Parking operators will be able to:

- Describe the parking they offer (including rates, times, restrictions etc).
- Publicise occupancy in real time.
- Accept payments and reservations from Service Providers without the need for a contract with each one.
- Digitise compliance monitoring without the need for local digital infrastructure.

Service Providers will be able to:

- Offer their customers the ability to park in any participating operator’s facility.
- Pay operators for parking used by their customers without the need for a contract with each one.
- Negotiate rates and access with operators for their customers.
- Reserve spaces in operator’s facilities.
- Develop value added services (e.g. guidance to space, frictionless parking) based on standard, available information.

For more information see the NPP project website. <https://npp-uk.org/>.

Figure 9. National Parking Platform Summary Diagram



### 4.3 Continuing Trend Towards Cashless Payments

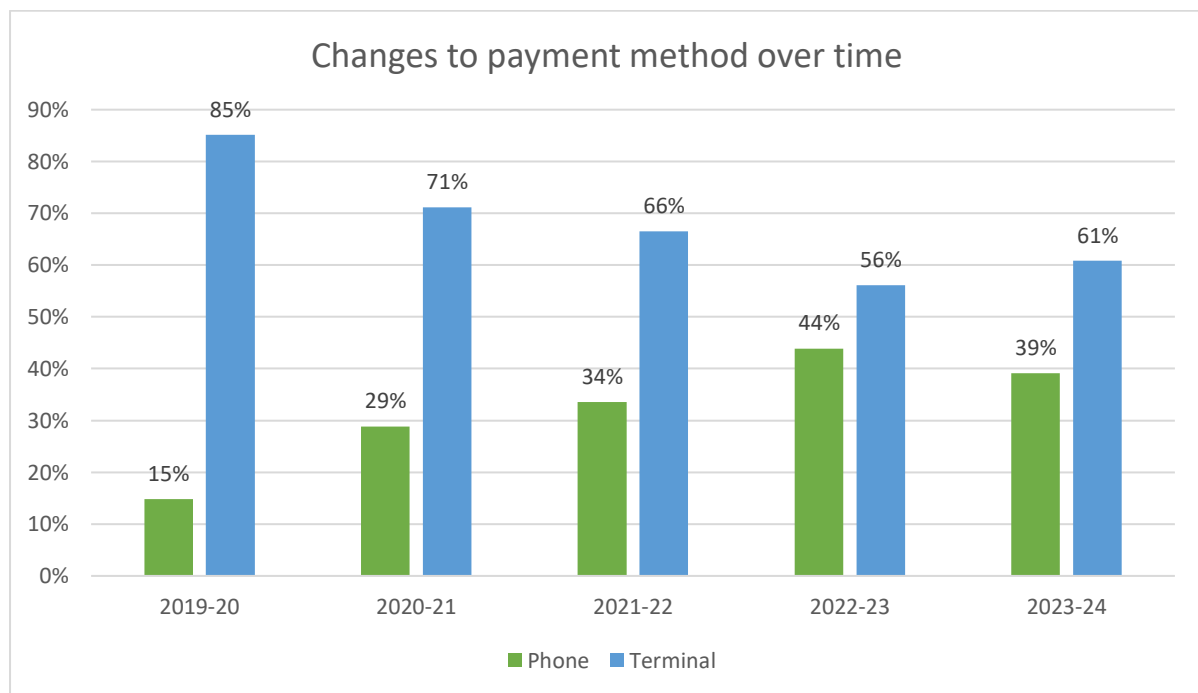
In most instances parking is a relatively small spend. Prior to the Covid-19 outbreak, cash remained the most common method of payments. The pandemic, and the increasing popularity of apps such as Apple Pay, GPay, PayPal, etc. mean that drivers now expect cashless solutions to pay for their parking. For the operator, cashless payments enhance operational efficiency, provides valuable data opportunities and removes the potential for theft.

Pre-pandemic research carried out by the British Parking Association (BPA) in 2019 found that 75% of motorists preferred to use cash and pay and display machines to pay for parking; although in an update carried out in 2021, given the choice most people would now prefer to pay by card.

It is clear that contactless cards and mobile payments are changing the way customers pay for all products and services and that customers now expect to be able to pay for services as seamlessly as possible and want a quick and effortless service. The BPA research found that motorist satisfaction is highest with barrier-free Automatic Number Plate Recognition (ANPR) managed car parks.

Changes in method of payment in Arun are in line with our experience from elsewhere in the country; we have seen a reduction in coin payments and an increase in card and phone payments since 2020 e.g. the proportion of cash transactions collect by York City Council has reduced from 25% in 2020/21 to 12% in 2022/23. If the trend shown below in 10 was to continue, then the majority of payments could be by phone in a few years' time.

Figure 10 - Arun Parking Payment Methods



## 5. Payment Technology options

This section summarises the payment technology options available to local authorities; however, it is important to first acknowledge the specific restrictions on the use of Automatic Number Plate Recognition (ANPR) cameras placed on local authorities in England and Wales.

ANPR technology is widely used for parking management in the private sector and by local authorities in other European countries. However, current UK legislation restricts UK authorities to using ANPR in a limited manner, such as near schools or for moving traffic offences.

The issue lies with the Protection of Freedoms Act 2012, which addresses the statutory rights concerning the recovery of parking charges from the registered keeper. Schedule 4 of the Act specifies that it only applies to "relevant land", excluding areas like parking places provided or controlled by a traffic authority. According to S32(4)(a) of the Road Traffic Regulations Act 1984, a parking place is defined as a location where vehicles, or specific classes of vehicles, may wait. Since council-owned car parks are already designated as such, they could be considered parking places under the law. Consequently, even if these car parks are leased out, they may be thought not to qualify as "relevant land" under the Protection of Freedoms Act, meaning the keeper cannot be held liable for unpaid parking charges.

This legal framework prevents the issuing of PCNs by post, eliminating one of the major compliance benefits and cost efficiency opportunities available to private sector operators but not to the public sector. While approved devices can detect non-compliance through ANPR, the regulations still mandate that a CEO affix PCNs manually. This requirement significantly reduces efficiency in all but the busiest towns and cities. In very busy urban environments, ANPR cars can detect non-compliance, allowing CEOs to be deployed to specific areas for enforcement.

The government's restriction on the use of ANPR was seemingly based on the premise that enforcement by local authorities using ANPR was unduly harsh. Elsewhere cities across Europe and North America have successfully introduced digitised systems based on ANPR surveillance. The result has been increased compliance, reduced numbers of penalties issued and increased revenue from payment of parking fees. UK authorities are now beginning to take advantage of the same technology within the constraints of the current parking legislation by using barriered systems that ensure payment before exit.

Recent developments by Cornwall Council which appear to test legislation in this area are discussed in Section 2.9 in relation to the associated issue of service delivery model.

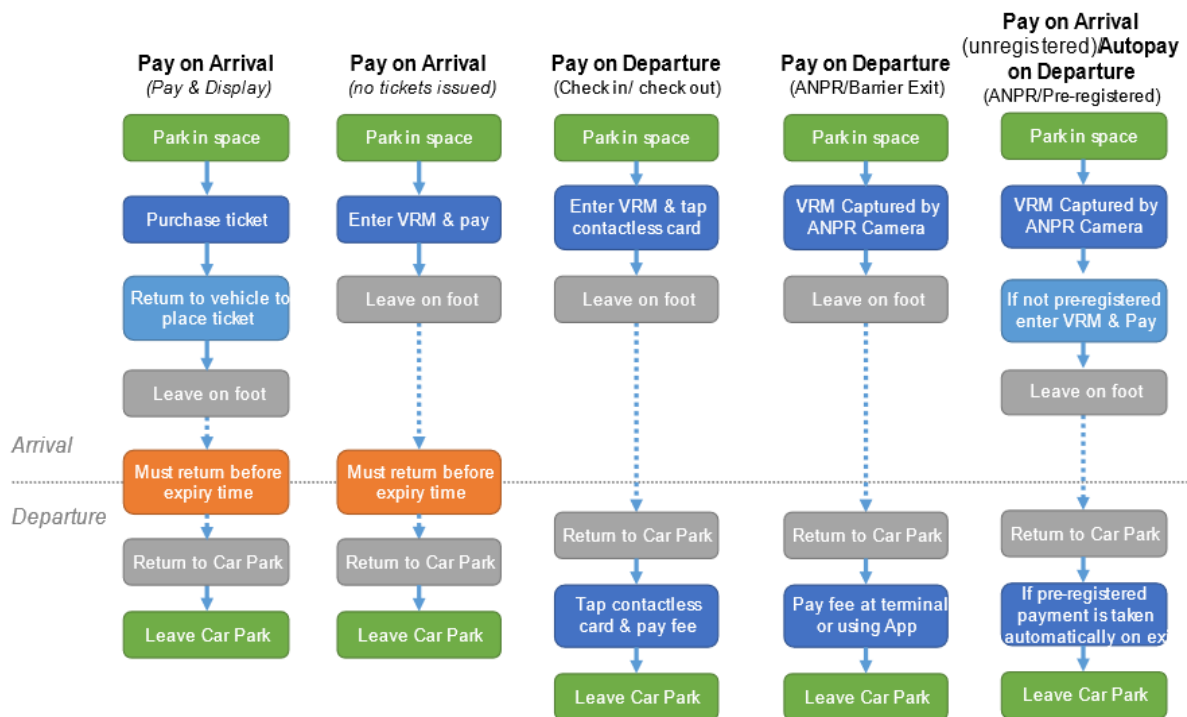
In the short to medium term, the increase in the number of connected cars will ensure that motorists have sufficient information and opportunities to park in a compliant manner. It is to be hoped that this will convince legislators to revisit this question and permit the appropriate use of technology to provide efficient identification and enforcement against non-compliant vehicles.

### 5.1 Options Available to Local Authorities

The diagram below in Figure 111 summarises the customer journey for the main types of parking payments which have been applied and are in common use in the UK.



Figure 11. Main options for payment methods



At present, the payments in Arun fall into “Pay on Arrival” with some permits managed digitally through the MiPermit website/phone application.

Pay and display is the system employed in Arun currently. The most basic type of P&D requires customers to arrive, park, find a payment terminal, pay for the desired time period by cash or card, the terminal prints a ticket, and the customer must return to their car to display the ticket in their windscreen. More modern variations allow pay by mobile (as used in Arun).

Compliance management requires Civil Enforcement Officers (CEOs) to be deployed to patrol the car parks for a fixed number of hours per month and issue Penalty Charge Notices (PCNs) to anyone parking and not complying with parking orders. These PCNs must be issued by hand and placed on the vehicle.

The existing pay and display terminals used by the Council in the district require the customer to collect a ticket at the machine and then return to the vehicle to display the dispensed parking ticket. The machines require payment on arrival and users are required to predict their length of stay. Many businesses express the concern that the inflexibility of this system impacts visitor dwell times. To counter this many councils (including ADC) have adopted payment by app/phone. This requires a contract with a payment by phone provider and car park users to register with the provider and pay a small convenience fee in addition to the tariff due. There is usually an option to receive reminder texts (alerting the customer when the parking session is about to expire) at an additional cost per text. The customer is also able to extend the parking period (subject to any length of stay restrictions) via the pay by phone provider’s app.

Other disadvantages of pay and display include: -

- As customers using the parking terminals need to return to their vehicle to display the ticket, parking terminals will ideally need to be distributed evenly around the car park to minimise

walking times, increasing the costs of services to and the installation of the machines and associated signage.

- The machines are limited in the type and amount of data that they can supply as they cannot identify the vehicles parked and the exact duration of actual stay compared with that paid for in advance.
- CEOs are required to inspect every windscreen for a ticket or a permit, whilst also carrying a handheld machine to check whether payments have been made via a payment by phone app. This can be a time consuming and inefficient method of compliance management. As a result, compliance levels can suffer too.

There are alternative systems commonly used for managing payment and car park access/egress which could be implemented at the Council's car parks, summarised below.

## 5.2 Pay on Arrival – Ticketless Systems with Option to Check in – Check Out

An alternative to pay and display, is to install more sophisticated payment terminals where instead of issuing a ticket for windscreen display, the payment is identified by the customer's vehicle registration number. Customers enter their licence plate on a payment terminal (similar to a P&D machine) on arrival. Customers have option to either:

- Pay on arrival using contactless card.
- Pay on departure ("check-in/check-out") using contactless card.

Customers can continue to pay using an app or account (there is no need to use the on-site machines) in either pay on arrival or departure mode.

The proposed payment terminals:

- **Require customers to enter their licence plate number.** They do not issue a ticket. This removes the need for customers to return to their vehicles to place a ticket in the windscreen. It enables the use of ANPR vehicles to identify potential non-compliance. CEOs with specially equipped handheld devices will be directed to these vehicles for follow up. This makes the process of identifying vehicles that may be in contravention more efficient. It also tends to increase compliance.
- **Allow customers to 'check in and check out'.** This can be installed as an 'add-on' function to payment terminals that accept card payment. Customers can use their credit/debit card to identify themselves on arrival, then return to the machine before departure. Using the same card enables the machine to calculate the fee, process payment and "check out" the vehicle. This removes the need for customers to estimate their stay length on arrival. A similar process can be used with pay by app. This approach has been successfully piloted by several Councils across the UK including Newcastle, Lichfield and Basingstoke.
- **Can download information on specific vehicles in real time.** A central permit system can therefore be used, for example providing reduced parking charges to local people who have enrolled in a scheme managed by the same system that manages residents' permits. Other databases may also be accessed to enable other services such as emissions-based charging.
- **Rationalise the parking machines required.** If machines no longer issue tickets or are used as check in-check out devices, then fewer machines may be required. Car park machines should also be re-positioned to make them convenient for customers entering or leaving the car park on foot.

### 5.3 Pay on Departure with barriers.

With this option, drivers approaching the car park entrance are slowed by a barrier that raises almost instantaneously. ANPR is used to identify vehicles (no requirement for tickets), and customers pay for time used when leaving. Machines accept payment by cash (with change) or card (contactless). Customers can also pay using an app or account (no need to use the on-site machines). The exit is controlled by a barrier.

This system:

- Provides a system with minimal delay at entry. ANPR does not require an entry barrier, but one is generally installed to simply prevent entry when the car park is full.
- Eliminates the potential mechanical failures of systems that issue tickets.
- Enables integration with other digitised systems within the Council (including permit systems) and provide data for traffic systems on vehicle flow and occupancy levels.
- Ensure compliance as customers must either have a pass or have paid to exit the car park.
- Allow for users to register and autopay.
- Is more expensive to install and maintain than other options.

Installing barrier systems in car parks is a very effective way of ensuring compliance but it can result in customers being unable to leave due to payment or equipment issues. A remote monitoring service must be employed to provide an immediate response to all calls made from the intercoms at entries, exits and payment stations. A control room can resolve the majority of issues remotely but in a very small number of cases control room staff will need to call on a person to assist at the car park. This can be an issue for many councils whose parking teams are not adequately resourced to deal with issues quickly. This can lead to a very poor parking experience if leading to blockages at exit, and in some cases has led to the vandalism of the exit barriers to allow exit.

CEOs will still need to patrol and issue PCNs (note that PCNs will still be relevant for those who park inappropriately, e.g. in disabled bays without a Blue Badge or in designated residential bays). Also, on site resources may have to be provided to manage the exit of Blue Badge holders if they park for free.

### 5.4 Pay on arrival / departure - Frictionless ANPR Payment

Despite the current restrictions on the use of ANPR cameras by Councils, barrierless ANPR systems linked to payment terminals can be used in a limited way to provide frictionless parking payments.

These frictionless ANPR systems work in a similar way to the Payment Terminals with “check-in/check-out” capability, however in addition, they allow local residents to pre-register their vehicles via the system provider which then allows them to automatically pay for their parking visits via a registered payment card. ANPR cameras monitor when the vehicle enters and exits the car park, calculates the tariff payment due and charges the user’s registered payment card. Car visitors who are not registered can pay at the parking terminals or via the pay by app/phone system as normal.

The benefits of this system are: -

- The registration number data together with accurate records of entry and exit times provides excellent compliance data to check and improve the efficiency of the compliance management service.
- An improved customer experience for registered users by allowing for frictionless payment.
- Accurate occupancy and length of stay data.
- Easy integration with businesses for parking tariff validation/concession options.

The downsides are that there are no benefits for non-registered users and CEOs are still required to enforce payments for these vehicles.

Some local authorities (including Croydon and Coventry) have contracted with a specific supplier to install and manage frictionless systems including all payments and registrations. However, the transaction fees charged by the system providers are also relatively expensive (upwards of 5% of the value of each transaction).

Instead, the Council could consider specifying and installing its own frictionless system using its existing payment by app supplier to manage payments with the potential to use the National Parking Platform to widen payment options. We are not aware of any council, that has taken this approach to date, but this would result in cheaper transaction charges than using the ‘closed’ systems adopted in Croydon and Coventry.

### 5.5 Comparison between customer systems methods

Figure 122 below shows a subjective comparison between systems and the potential advantages they can provide to customers and operators (1 tick adequate, 2 ticks good, 3 ticks excellent)

Figure 12 – Comparison of Functionality

	Pay on Arrival (Pay & Display)	Pay on Arrival by Licence Plate (no tickets issued)	Pay on Exit (ticketless) (Check in/Check Out)	Pay on Exit (ANPR/Barrier Exit)	Pay on Arrival/ Autopay on Exit
Customer Experience	✓	✓	✓✓	✓✓✓	✓✓✓
Data	✓	✓✓	✓✓	✓✓✓	✓✓✓
Payment Compliance	✓	✓✓	✓✓	✓✓✓	✓✓
Business Connection Capability	X	✓✓	✓✓	✓✓✓	✓✓✓
Live Data Potential	X	✓	✓	✓✓✓	✓✓
Capital Cost	✓✓✓	✓✓✓	✓✓✓	✓	✓✓
Maintenance Costs	✓✓	✓✓✓	✓✓✓	✓	✓✓

Figure 133 shows approximate costs for providing these different systems based on our recent experience.

Figure 13 – Capital and Revenue Cost Implications

Option	Indicative Capital Cost	Estimated Revenue Cost Impact
Pay by Licence Plate	£6,000 per terminal (inc installation)	£600 per terminal for cloud based reporting system licence.
Pay on exit/Check in check out	£6,000 per terminal (inc installation)	£600 per terminal for cloud based reporting system licence. Additional card processing costs for pre-authorisations
Pay on Exit/Barriered ANPR	£80,000 (assuming 3 lanes) plus 10% to 25% installation costs	Maintenance of 10% of capital cost plus £20k-£30k for remote monitoring of system
Frictionless ANPR Payment	£50,000	Maintenance of 10% of capital cost plus additional card payment processing costs

The BPA research from 2021 referred to above, gathered public opinion on parking technology. The highest positive scores were recorded for: -

- Barriers where payment required tickets or tokens – 45%.
- Barrier free ANPR camera systems – 44%.
- Parking payment terminals which require the full number plate to be entered – 40%.
- Paying by phone or text -28%.

## 5.6 Bay Monitoring Technology

By more effectively monitoring usage, including length of stay, operators and councils can better manage their assets and resources and provide better information to their customers.

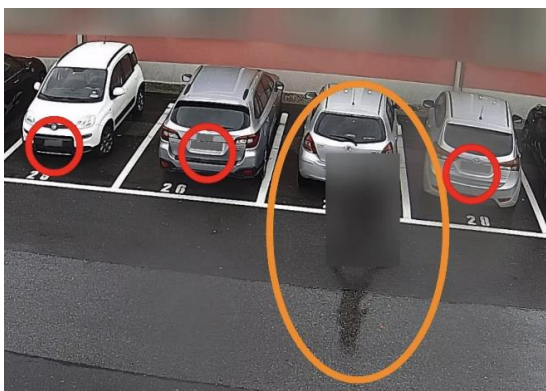
- Optimisation of space utilisation - By monitoring parking levels, operators can understand the demand for parking spaces at different times of the day and on different days of the week. This information allows them to optimise the allocation of parking spaces, for example the balance between permit parking and long / short stay spaces and so ensure that available spots are utilised efficiently.
- Improved Customer Experience – availability of parking spaces in real-time, or estimated based on previous demand, can significantly enhance customer experience by reducing the time spent searching for parking, alleviating frustration, and improving convenience.
- Increasing Revenue - By optimising space utilisation, redesigning parking layouts, for example data may show more permit parking at a site may be possible. Additionally, real-time monitoring would allow operators to implement dynamic pricing strategies, charging higher fees during peak demand periods and adjusting prices based on parking availability (granted this is difficult for local authorities).
- Efficient CEO deployment –monitoring can provide a clear picture of compliance levels which can be used to deploy CEOs to locations and at times when non-compliance is an issue.

## 5.7 Options for monitoring

Length-of-stay and compliance can be measured using barriers or ANPR/ CCTV technology.

Use of ANPR cameras to record entry/exit also provides the ability to carry out periodic compliance surveys. Artificial intelligence solutions already exist to utilise ANPR or existing CCTV feeds and software to monitor the arrival and departure of vehicles. This would provide real-time occupancy data and combined with data from updated payment systems, close to real time compliance information. Latest supplier information suggests a system would work on fixed price per space which may not provide good value, especially as CCTV improvements would also likely be necessary.

*Figure 14. Parquery example of monitoring with GDPR compliance*



## 5.8 Variable Message Signs

Variable Message Signs (VMS) are highway signs, often used in large towns and cities with complex circulatory systems and multiple car parks, which direct customers to car parks where space is available. The accuracy of these systems has always been subject to proper management and

maintenance of the system. More modern in-car systems and use of mapping apps on smartphones is likely to make the old technology of VMS much less relevant, if not redundant.

## 5.9 Technology Strategy

In Arun at present, there is little information around real time or historic occupancy of car parks, who your customers are and how often they visit, disc usage, and given the tariff structure in some places, length of stay.

Mobile phone payments are increasing as payments at terminals decrease (see Figure 1010).

Permits are already managed online via MiPermit.

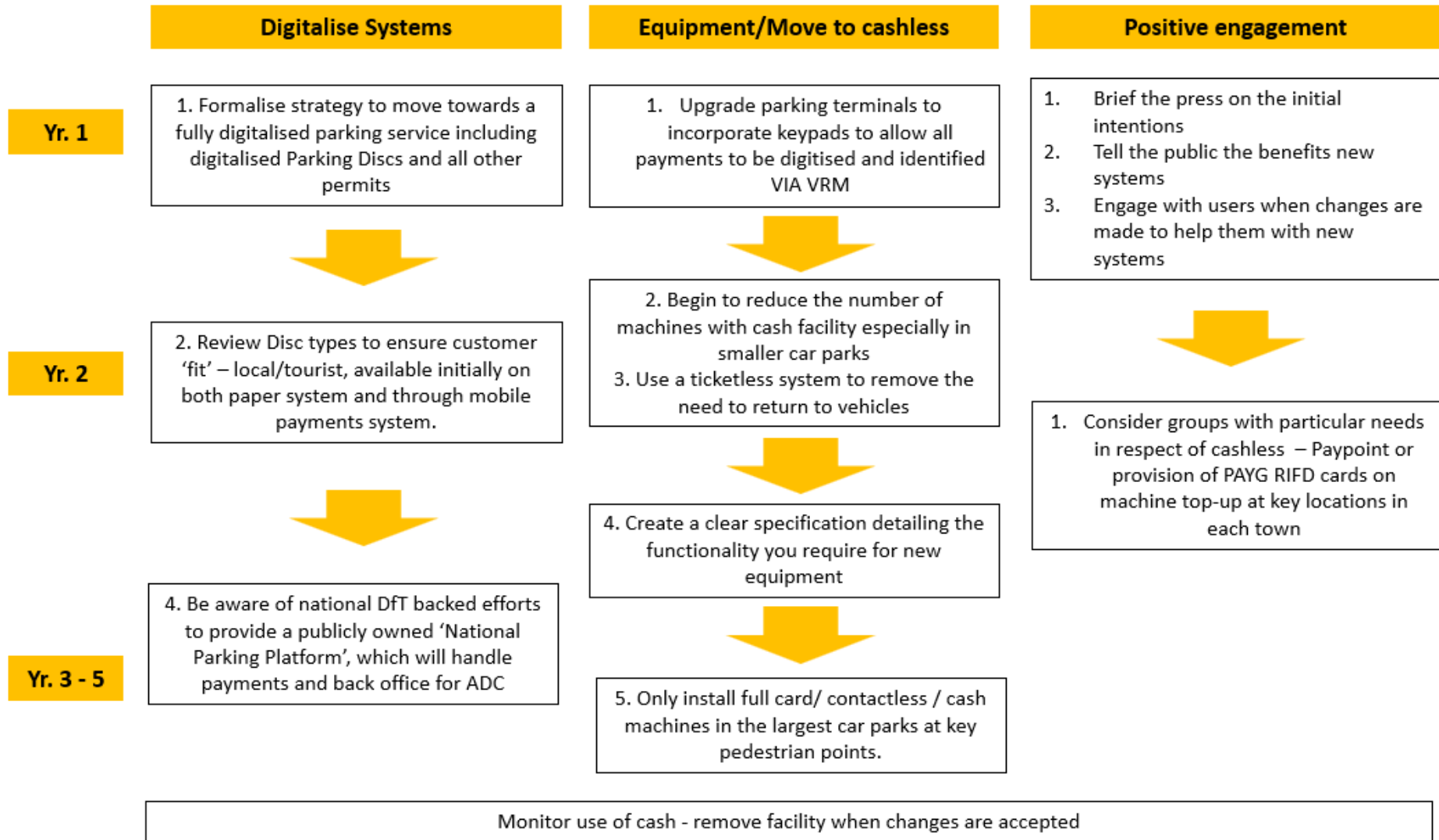
The Flowbird Strada payment terminals are new and in good order. They accept card payments but do not record the Vehicle Registration Mark (VRM) of vehicles. This means that maximum stay / no returns could be difficult to enforce, tickets can be transferred and there is very little information on who is parking and how often.

*Strategic Recommendation: To prepare for changes in technology and legislation to respond to changes in technology and legislation the service must move to a fully digital service.*

Technology Strategy	Recommendation
<b>Upgrade Payment Terminals</b>	Strada payment terminals in some car parks should be upgraded to record VRMs. This will be key to providing better information and to help enforce restrictions around maximum stay and no returns.  Information we have from Flowbird puts the price of an upgrade at around £600 per terminal. This could pay for itself very quickly in the seafront car parks (see Tariff Structure later).
<b>National Parking Platform</b>	ADC should join the DfT's National Parking Platform when the pilot is complete. This will manage your parking rights and purchasing for you.
<b>Variable Message Signs</b>	Investment in Variable Message Signs may not be a suitable option. As well as becoming defunct (due to a world of in-car systems and connected mobile phones) it would require significant investment including occupancy monitoring equipment and ongoing (daily) in-person accuracy checks.
<b>Move to Virtual Parking Discs</b>	Remove the paper disc and move to a virtual disc, if the scheme is retained (see Disc Parking).

The Technology Strategy diagram in Figure 15 outlines an approach which underpins many of the other policy options and supports actions recommended in this report.

Figure 15. Technology Strategy





## 6. Tariffs and Parking Policies

Tariffs are the principal tool to manage parking demand and influence driver behaviour. The tariff recommendations below are for the short-medium term (1-3yrs) and are based on the information currently available. The absence of length of stay data, beyond the tariff purchased, limits recommendations to modest changes which aim to improve customer service and traffic management whilst staying broadly revenue neutral. With better information, either through extensive surveys or as a result of the service being digitalised, it will be possible to completely re-design the tariffs to further improve them.

### 6.1 Tariff Pricing & Structure

The overall conclusion from the Stage 1 Report was that on a district wide level, the tariff levels appeared reasonable and reflected tariffs in other places with similar characteristics, but that tariffs in Arun are complicated to understand and there are some anomalies which need to be dealt with.

Town centre tariffs include some anomalies such as the purchase of two 2hr periods being cheaper than one 4 hr period, where it is currently difficult to prevent this abuse. Also, on sites covered by seasonal tariffs the introduction of intermediate longer stay tariff bands would provide more flexibility for visitors.

With the further work undertaken in this Stage a number of anomalies and issues with the tariff bands have been identified at a site-specific level and are summarised in this section of the report.

The following principles are employed when considering changes to tariffs:

- Balancing supply and demand across sites through tariffs.
- Promoting churn and shorter stays on the busy surface car parks to support the town centres and making better use of assets for quieter car parks.
- Fair rates which reflect the location and value of a space in a given car park or car park cluster.

### 6.2 Arundel

The Fitzalan (Lido) car park charges until 20:00 hours seven days a week. Charging hours at Crown Yard should be brought into line with the Fitzalan site as there should be consistent regulations for customer clarity and to improve enforcement efficiency.

### 6.3 Bognor Regis

A slightly reviewed approach to tariffs in Bognor Regis could yield quick wins to improve flexibility for customers.

#### Town Centre Tariff Issues

MSCPs are generally less popular than smaller surface car parks due to a perception of improved security and easier accessibility. Increasing the differential between the MSCP and the surface sites further could, if well communicated, help to make more space available in the popular surface car parks and better fill the MSCP. This could be done on an experimental basis to see what impact it might have.

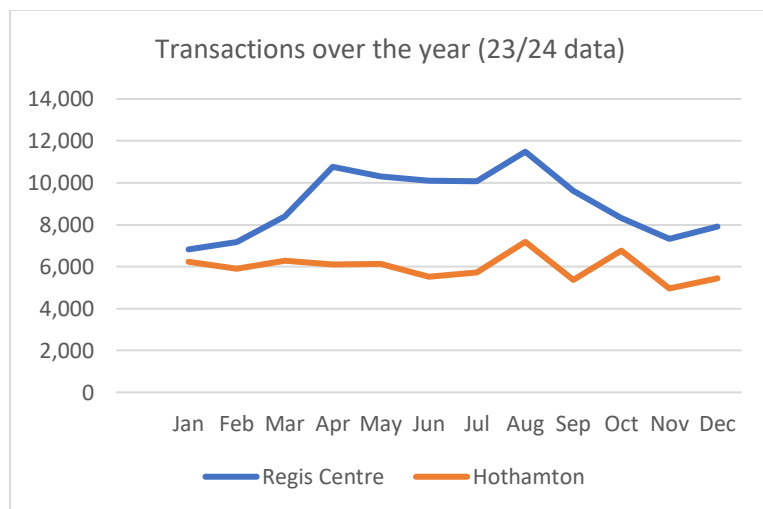
London Road cannot be easily categorised as it is some way from the town centre, not close to the sea front and is therefore less well used. As stated in the Stage 1 Report, it is a major asset to the



district, providing opportunities for coach, lorry, camping car and longer stay vehicles. There are some site-specific options in Section 7.2 to make better use of this facility.

The Regis Centre is close to the sea front and has a more seasonal usage profile than other town centre car parks (Hothampton is used as a comparison below). With the suggested changes to the Gloucester Rd site only 400m away, whether this site should sit under the seasonal tariff should be reviewed periodically.

Figure 16. Seasonality comparison between the Regis Centre and Hothampton sites



### Town Centre Tariff Recommendations

To encourage better utilisation of Fitzleet MSCP and London Rd car park, and to provide greater coherence and encourage greater space availability in the surface car parks through increased churn, we recommend changes to tariffs to increase the differential between these car parks and other town centre sites in order to incentivise their use for medium and longer stays.

Figure 17. Town Centre tariffs

Name	1hr	2hr	3hr	4hr	10hr
Town Centre	£1.65	£2.20	£3.85	£6.05	£8.80
Fitzleet MSCP	£1.65	£1.65	£2.75	£4.40	£7.70
London Rd (current)	£1.30	£2.20	£5.50	£5.50	£5.50
London Rd (suggested)	£1.30	£2.20	£2.75	£4.40	£5.50

### Seasonal car park issues

West Park does not fit easily into either the town centre or seasonal categories. This car park is used for shorter stay trips by local people visiting the park all year around and by visitors for longer trips in the summer. These shorter local trips are currently facilitated by 2-hour free parking with an all-day rate that manages demand and turnover.

There were only 302 all-day tariffs purchased in 2023/24 with a very heavy bias towards the summer (with 67% between April and September). Comparisons are difficult. The privately operated Yomper car park near Portsmouth charges £7.50 per day all year round, Hengistbury Head near Christchurch charges £13.00 for 6hrs in the summer and £4.80 all day in the winter.

There is currently insufficient data available to model the impact of changing the tariffs on income but given the low volumes of all day tickets purchased and the availability of on-street parking space nearby, a cautious approach to changing tariffs is proposed. This can be reviewed annually.

Gloucester Road is also difficult to categorise. It is subject to three seasonal tariff bands which makes it an outlier in the town. Last year there were 13,800 transactions for the 12-hour tariff in the July/August high peak when the all-day tariff increases to £13.20. For consistency we would recommend having only one seasonal charge from 1<sup>st</sup> March to 31<sup>st</sup> October, however reducing the peak tariff to £11.00 would result in a fall in annual income of approx. £13,800. Despite benefits in the form of simpler communications, enforcement etc. the reduction in income is hard to justify.

As a proportion of likely spend on a trip to the area £13.20 is reasonably small, we would recommend that the longer stays rates for this site are brought into line with our recommendations for the seasonal car parks in Littlehampton.

Figure 18. Current seasonal tariffs

Name	WINTER – 1 <sup>st</sup> November – 30 <sup>th</sup> April					SUMMER - 1 <sup>st</sup> March – 31 <sup>st</sup> October*				
	1hr	2hr	3hr	4hr	>10hr	1hr	2hr	3hr	10hr	>12hr
Seasonal	£1.30	£2.20	£4.40	£4.40	£4.40	£2.20	£3.85	£5.50	£11.00	£11.00
Gloucester Rd	£1.30	£2.20	£4.40	£4.40	£4.40	£2.20	£4.40	£11.00/ £13.20	£11.00/ £13.20	£11.00/ £13.20
West Park	Free	Free	£2.00	£2.00	£2.00	Free	Free	£7.00	£7.00	£7.00

Figure 19. Suggested seasonal tariffs

Name	WINTER – 1 <sup>st</sup> November – 30 <sup>th</sup> April					SUMMER - 1 <sup>st</sup> March – 31 <sup>st</sup> October*					
	1hr	2hr	3hr	4hr	>10hr	1hr	2hr	3hr	4hr	5hr	>12hr
Seasonal	£1.30	£2.20	£4.40	£4.40	£4.40	£2.20	£4.40	£5.40	£6.60	£7.70	£11.00
Gloucester Rd	£1.30	£2.20	£4.40	£4.40	£4.40	£2.20	£4.40	£5.50	£6.60	£7.70	£13.20
West Park	Free	Free	£2.20	£4.40	£4.40	Free	Free	£3.85	£5.10	£6.30	£9.10

## 6.4 Littlehampton

Littlehampton town centre tariffs are skewed by disc parking where this is available as 1 and 2hr tariffs are set below the price of a disc. The tariff structure enables the purchase of two-2hr tariffs at £2.20 (for 4hrs) compared with a 4hr tariff of £6.05, i.e. £1.65 less.

An anomaly also exists for the seaside sites where it is possible that the absence of 4–10-hour tariffs may be encouraging the purchase of multiple 3-hour payments at £4.40, to avoid the £13.20 day rate (e.g. £4.40 x 2 for 6 hours = a saving of £4.40).

Two options are presented to address this:

- Option 1: The addition of 4, 5 and 6 hour tariffs at seaside sites and changes to tariffs in the town centre. This would improve customer choice and remove the incentive to purchase multiple tickets. There is a risk that this will reduce the overall average ticket price if the benefit of preventing abuse is outweighed by the loss of revenue from users who are currently paying the full daily rate.
- Option 2: Install VRM keypads on the payment terminals to prohibit topping-up and the rules changed on the RingGo app to prevent additional short stay periods being added instead of the full longer stay or daily amount. The Parking Places Order would need to be amended to prevent a return to the car park within a 1-hour period, and this could be enforced simply if VRMs are captured. This may however deter existing users who are able to top up their stays.

## Town Centre Tariff Structure

In order to reduce the incentive to purchase multiple 2hr tickets (so as to save on the 4hr and 5hr tariffs) we suggest reducing the tariff for 4hrs and introducing a new 5hr tariff band. Any resulting reduction in income from this reduction could be made good with from fewer multi 2hr tariffs being purchased.

Figure 20. Suggested Littlehampton town centre tariffs

Name	1hr	2hr	3hr	4hr	5hr	10hr
Current	£1.65	£2.20	£3.85	£6.05	£8.80	£8.80
Suggested	£1.65	£2.20	£3.85	£5.10	£6.05	£8.80

## Seasonal Tariff Structure

We have used data we have collected from other south coast towns to consider what a 'typical' seafront car park length of stay profile might be where hourly tariffs are in place. Based on this data, the 2-hour tariff in Littlehampton is significantly more popular than might be expected which would suggest that there is abuse of the tariff structure as suspected.

Figure 21. Length of stay in Surrey St compared to other sites

AUGUST	Surrey St.	West Green	Town 1	Town 2
1 hr	27%	21%	9%	23%
2-3 hrs	62%	65%	39%	46%
Over 3 hrs	11%	13%	52%	31%

Although it is difficult to model the impact of Option 1 accurately without length of stay data, assuming usage profile is similar to seasonal sites in the other coastal towns for which we have data, we would expect to see a change in revenue as follows:

Figure 22. Potential revenue change of changes to tariff structure

WEST BEACH LITTLEHAMPTON						
	Current Volumes	Modelled Volumes	Current Tariff	Proposed Tariff	Current Revenue	Potential Revenue
1 hr	3223	3452	£2.20	£2.20	£7,091	£7,595
2 hr	0	3377		£3.30		£11,144
3 hr	9794	3376	£4.40	£4.40	£43,094	£14,854
4 hr	0	2032		£6.60		£13,412
5 hr	0	554		£8.80		£4,877
6 hr	0	924		£11.00		£10,161
7 hr	0	185		£13.20		£2,439
8 hr	0	369		£13.20		£4,877
9 hr	0	185		£13.20		£2,439
10 hr	1993	554	£13.20	£13.20	£26,308	£7,316
					<b>£76,492</b>	<b>£79,113</b>
					Difference	103%

Adopting Option 1 and (in the same way as our recommendation for Gloucester Road in Bognor Regis) extending the July/August seasonal tariff to cover the whole summer season would have benefits for customer legibility, and management of the sites (e.g. removing the need for quarterly

changes to tariff boards). Whilst the model in Figure 222 shows a marginal increase in revenue if the recommendation is implemented it would be prudent to review the position annually.

Although the change from the winter to summer tariffs could be viewed as ‘sudden’, it reflects the very real changes in demand between the periods (see Stage 1 Report). Additionally, the impact on local people is mitigated by discounted season tickets currently available to residents or a discounted resident tariff during the summer peak. A resident tariff could be implemented through a smart card, with additional changes to terminals or recording the VRM and checking against a white list of registered residents.

In summary, the overall recommendation is to implement a consistent summer pricing policy, introduce additional hourly tariffs to improve customer choice and remove the incentive to buy multiple shorter stay tariffs.

Figure 23. Current and suggested seasonal tariffs

Seasonal	WINTER – 1 <sup>st</sup> November – 30 <sup>th</sup> April			SUMMER - 1 <sup>st</sup> March – 31 <sup>st</sup> October				JULY /AUGUST				
	1hr	2hr	>10hr	1hr	2hr	3hr	>12hr	1hr	2hr	3hr	>12hr	
Current	£1.30	£2.20	£4.30	£2.20	£4.40	£4.40	£11.00	£2.20	£3.80	£3.85	£13.20	
Seasonal	WINTER – 1 <sup>st</sup> November – 30 <sup>th</sup> April					SUMMER - 1 <sup>st</sup> March – 31 <sup>st</sup> October*						
	1hr	2hr	3hr	4hr	>10hr	1hr	2hr	3hr	4hr	5hr	6hr	>12hr
Suggested	£1.30	£2.20	£4.40	£4.40	£4.40	£2.20	£3.30	£4.40	£6.60	£8.80	£11.00	£13.20

## 6.5 Season Tickets

The Stage 1 Report concluded that season tickets are very heavily discounted to a level of discount well above that offered by most authorities. . Given the changes proposed above to seasonal car park tariffs, the Council may wish to continue to provide a discount to residents on seasonal car parks whilst retaining a 'market rate' for visitors. Many places do offer different season ticket prices for residents and non-residents. For example, in Medway a 3-month season ticket is £190 for residents and £220 for non-residents and £640 against £730 for 12 months (14% and 12% discounts respectively).

This could be achieved via a resident only scheme which should be possible using the current permit system by submitting council tax number, name and address through MiPermit, as this system is extensively used for resident parking permits across the country, including within the Bognor Regis CPZ.

The current season tickets can be used in both towns. This does not reflect the different tariffs and characteristics of each town. The current offer of £220 pa for 11 car parks across the two towns is exceptionally generous in comparison with nearby places, for example Haywards Heath which charges £936 for three car parks on the edge of the town centre.

Changes to season ticket prices will need to be introduced gradually with a reduction in the discount level each year until the desired discount is achieved. To do otherwise would risk displacement to on-street parking.

### Recommendations

Season Tickets	Recommendation
<b>Sales management</b>	Continue to manage all seasons online through MiPermit
<b>Discount level</b>	Reduce the discount levels for non-residents to closer to 50% and for residents to 60%, with a higher level for seaside car parks to allow for leisure trips such as exercise and dog walking (>70%).
<b>Coverage</b>	Separate season ticket products covering Town Centre and seasonal car parks in Bognor Regis and Littlehampton separately.

## 6.6 Disc Parking

Stage 1 surveys found that use of discs was as high as 70% in Lyon Street and as low as 25% in Fitzleet MSCP. Discs are a convenience, and it follows that their use will be higher in the most convenient car parks such as Lyon Street and Anchor Springs.

The Stage 1 Report concluded that it is extremely difficult to enforce restrictions on the use of cardboard discs e.g. extending a stay beyond 2 hours by altering the time on the disc, or multiple uses on one day.

Perhaps more importantly, disc parking is also inconvenient for new visitors who have to find somewhere to purchase a cardboard disc before arrival and could be limiting town centre stays to under two hours. Town and retail centres typically aim for a customer dwell time of around 2-3 hours. This duration is considered optimal as it allows customers enough time to explore, shop, dine, and engage with various activities, leading to increased spending and a better overall experience.

Furthermore, the current physical parking disc system is not consistent with a digitalised parking strategy. It is impossible to measure the usage of a physical disc, essential data that would allow policy makers to assess its effectiveness against a parking strategy. It also reduces compliance management efficiency as enforcement officers have to inspect every windscreen. An example of a digital only alternative is the “Southend Pass” in Southend-on-Sea which is an annual limited stay free parking initiative similar to the disc system in Arun. It is a digital only product open to residents and visitors and can be purchased monthly or annually via the parking app.

In considering options for a policy on disc parking we need to be mindful of the technology strategy.

Disc Parking Options	SWOT – from operators’ point of view
<b>No change: two hours in town centre car parks with a paper/virtual disc</b>	<b>Weakness:</b> Disc parking forgoes significant income, subsidises some drivers over others, is hard to enforce and may be dissuading longer, higher value, stays in the town centres.
<b>Option 1: Virtual disc parking only</b>	<b>Strength:</b> Easier to enforce, saves printing costs, gives better data, allows easy top-ups and better usage. <b>Weakness:</b> Survey suggests low public appetite. <b>Opportunity:</b> Better management data. <b>Threat:</b> Accessibility issues. Requires good mobile coverage.
<b>Option 2: Replace with a 1-hour free parking</b>	<b>Strength:</b> Potentially increases revenues. Would remove the need for disc printing and potentially make enforcement more efficient. <b>Weakness:</b> Either requires online (which can then be topped up) or machines to print a £0.00 ticket. <b>Threat:</b> May encourage even shorter stays in the town centre.
<b>Option 3: Increase the costs of a virtual / paper disc to reflect the utility</b>	The price of the disc given its value should be increased. For example, nearby Horsham charges £20. <b>Strength:</b> Recover some of the income forgone. <b>Weakness:</b> Survey suggests low public appetite.
<b>Option 4: Removal of disc parking scheme</b>	<b>Strength:</b> Benefits to operations, income, turnover of spaces, potential increases length of stay. <b>Weakness:</b> Unlikely to be achievable given politics around the scheme. <b>Opportunity:</b> Brings these car parks in-line with others in the district and other places.

## Recommendation

To provide a modern, digital and agile parking service to better serve the towns, the cardboard disc should be removed or replaced with a digital system that provides better management information and can respond to digital and legislative changes that are likely to arise over the coming years.

Disc Parking	Recommendation
<b>Policy Review</b>	Consider what the purpose of the disc parking is. Does it still apply? Is there another solution that provides the same function without the Council bearing all of the costs associated with it?
<b>Digitise Discs</b>	If disc parking is retained, digitise the scheme. This will reduce costs associated with enforcement and printing and make enforcement of the current T&Cs (i.e. one use per day).

### 6.7 Blue Badge Policy

For local authorities, whether or not disabled parking should remain free for all Blue Badge holders is essentially a political decision. Almost all private operators and many councils charge Blue Badge holders as they consider that disability is not necessarily related to the ability to pay. Nationally, free parking for 3 hours is allowed in many on-street locations. Imposing off-street parking charges will reduce abuse given there is no longer an incentive for Blue Badges to be shared with family members to avoid parking charges.

To limit this abuse, whilst recognising that some disabled users have more difficulty parking and getting in and out of their vehicles, we recommend charging Blue Badge holders, but offering one additional hour over the paid period free with a Badge. The tariff options offered on the payment machines and pay by phone/app system will need to be amended so that a disabled only tariff option can be chosen to implement the extra hour.

The impact of implementing charges for Blue Badge holders is difficult to measure from available data. However, anecdotal evidence from other local authorities on the south coast suggests it could generate circa 5%-6% of additional gross revenue (net of VAT).

As discussed in the Stage 1 Report, the longer-term sustainability of a policy of free parking for Blue Badge holders is a future consideration. The population profile of the country and district is ageing and there is a correlation between age and mobility.

Some policy options are outlined below:

Blue Badge (BB) Options	SWOT
<b>No change: free parking for Blue Badge holders</b>	<b>Strength:</b> Simple. Easy to enforce and understand. <b>Weakness:</b> Assumes low incomes for BB holders. <b>Threat:</b> Sustainability of policy is undermined if numbers of Blue Badges increase due to ageing population (see S1 Report).
<b>Option 1: Charge all Blue Badge holders from 0hrs</b>	<b>Strength:</b> Brings Blue Badge policy in line with private operators and other authorities. <b>Threat:</b> Requires a major change in policy.
<b>Option 2: Free parking for three hours</b>	<b>Strength:</b> Brings Blue Badge policy in line with on-street policy. <b>Threat:</b> Additional enforcement.
<b>Option 3: Additional hour free (on top of disc parking)</b>	<b>Strengths:</b> Reflects mobility needs. Simple to enforce / work into the off-street order. <b>Threat:</b> Requires a major change in policy and additional enforcement effort.

We would recommend that in line with the private sector, Blue Badge parking is subject to a tariff, but with an extra hour allowed to reflect mobility needs. Any specific user groups to which the Council wishes to offer free parking could be required to register the VRN digitally for easier and more efficient compliance management.

## 6.8 Annual Tariff Reviews

Amending the tariffs in an off-street parking places order requires a statutory process in accordance with the Road Traffic Regulations Act 1984. Procedures for doing so are specified by the Act and in the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996.

As well as the statutory requirements, internal processes often make even minor changes, especially increases to tariffs, disproportionately onerous for smaller districts.

Speeding up the process of tariff reviews will allow the Council to be more agile in its approach to market conditions and free up officer time for more strategic decision making.

In our experience a commercial provider would set tariffs based on demand and an assessment of market elasticity. This would be based on regular, periodic reviews of supply and demand, using occupancy and income data to design tariffs tailored to users. Councils have a more difficult job as they must balance the management of parking demand with the wishes of its elected members and stakeholders, therefore this process is more nuanced.

We recommend that changes to parking tariffs should be a delegated decision to the appropriate officer level subject to changes being in line with the Consumer Price Index +1% (rounded to the nearest 10p) in order to make the process quicker, more efficient and more related to prevalent market conditions. If officers advise that the tariff levels should be changed more than this, the fee decision would revert to the relevant committee.



## 7. Town and Site Recommendations

The Stage 1 Report concluded that in general the condition of car parks sites was good or very good, with few exceptions, although there were specific opportunities for improvement. In this section we discuss some estate-wide options for carbon reduction and then consider potential improvements to specific sites.

### 7.1 Carbon Reduction and Sustainability

The need to reduce carbon emissions is a key driver for the Council in its Sustainability Strategy.

#### Emissions Based Charging

Phone payment apps could be a practical way of offering reduced tariffs to encourage the use of low emission vehicles. For example, RingGo offers an Emissions Based Parking (EBP) service using vehicle registrations and information from the DVLA, to automatically vary parking tariffs based on the emissions of the vehicle.

In Bath and North East Somerset (where MiPermit provide cashless parking services), the council recently introduced vehicle emission-based parking charges in council-owned car parks. This approach would first require digitisation of the enforcement service.

#### Electric Vehicles

During the 2010's free parking for EVs whilst charging was considered by some councils as a policy to encourage electric vehicles (e.g. Bristol. Swindon). However, in almost all places now, EVs have to pay for parking whilst charging as parking and charging are two separate services, and to encourage vehicle turnover on limited numbers of chargepoints. A full EV strategy has much wider scope than its relationship to parking.

#### Green Infrastructure

Incorporating green spaces, such as trees and plants, within car parks can help absorb CO<sub>2</sub> and improve air quality. Using permeable materials for parking surfaces can reduce surface runoff and support local ecosystems although there is an increased cost of installation and maintenance.

#### Solar Panels and Energy Efficiency

Installing photovoltaic (PV) solar panels on car park structures can generate renewable energy, reducing reliance on fossil fuels. The installation of solar panels is commonplace in many countries including France which now requires all car parks with more than 80 spaces to be covered in solar panels. By doing so it aims to add 11GW to the electricity grid<sup>14</sup>. PV is also commonplace in Spain, Germany and Sweden. The feasibility of solar panels over car parks depends on factors like sunlight availability, shading, and local policies and should be considered through an Investment Strategy.

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<sup>14</sup> [France's plan for solar panels on all car parks is just the start of an urban renewable revolution \(theconversation.com\)](https://theconversation.com/france-s-plan-for-solar-panels-on-all-car-parks-is-just-the-start-of-an-urban-renewable-revolution)

Energy efficient lighting, using motion sensors in car parks, can reduce energy consumption and lower carbon footprints and energy costs.

Item	Recommendation
<b>Emission Based Charges</b>	Future tariff reviews could consider introducing higher tariffs for high emission vehicles subject to reasonable provision of alternative 'cleaner' transport modes and in accordance with the Local Transport Plan.
<b>Electric Vehicle Parking Charges</b>	Electric Vehicles should pay for parking whilst charging
<b>Green Infrastructure</b>	Seek opportunities for 'pocket parks' and tree planting. Consider permeable surfaces with caution, given increased capital and revenue costs.
<b>Solar Panels</b>	Solar Panels have the potential to provide carbon free energy and are now standard in places such as France. Each proposal would need to be considered against planning, grid availability and financial feasibility.

## 7.2 Coach, Lorry and Camping Car Parking

London Road Lorry and Coach Park appears to be underutilised, with almost no recorded use during the survey days and a very small income of £1,515 in 2023/24.

Many authorities across the country, with a significant tourist market, seek sites for overnight camping cars. The presence of an existing public toilet could make London Road an ideal location for overnight camping without the need to find a new site.

There exist low-cost options used across Europe and in the Scottish Highlands to encourage camping car tourism, which include unstaffed sites and / or chemical toilet disposal for a small ongoing revenue cost. Northumberland County Council provides overnight camping for £12 per night and a site in Appledore charges £15 per night. With so little provision in neighbouring authorities, formal provision in Bognor could prove popular, but this will need to be explored in an Investment Strategy.

Options for London Rd should be considered through feasibility or an investment strategy with the input of specialists. We would advise, given the national shortage of coach parking facilities, that Arun should be retain this resource and make better use of it unless there is a compelling case for disposal. Once provision is removed, it is very difficult to find alternative provision.

## 7.3 Arundel

Options in Arundel are limited by the availability of land under Council control. The presence of free on-street parking (for which there is high demand), limits options for better encouraging churn and managing demand through pricing changes. Our visits were short and saw only a snapshot of the parking situation across the wider town, but based on experience WSCC may wish to consider on-street parking controls, and charging might be justified from a traffic management point of view.

## 7.4 Bognor Regis

Wayfinding could be improved but town centre parking is signed from the Chichester Rd Roundabout to the B2166. This signage should be formalised. Drivers could benefit from signage approaching the crossroads, at the entrance to the Controlled Parking Zone, signing straight ahead to car parks.

On our site visit, we turned left into Kelby Drive, not knowing that the entrance and exit ramps are separate.

Figure 24. Exit of the Chichester Rd Roundabout to the B2166 heading towards the town centre

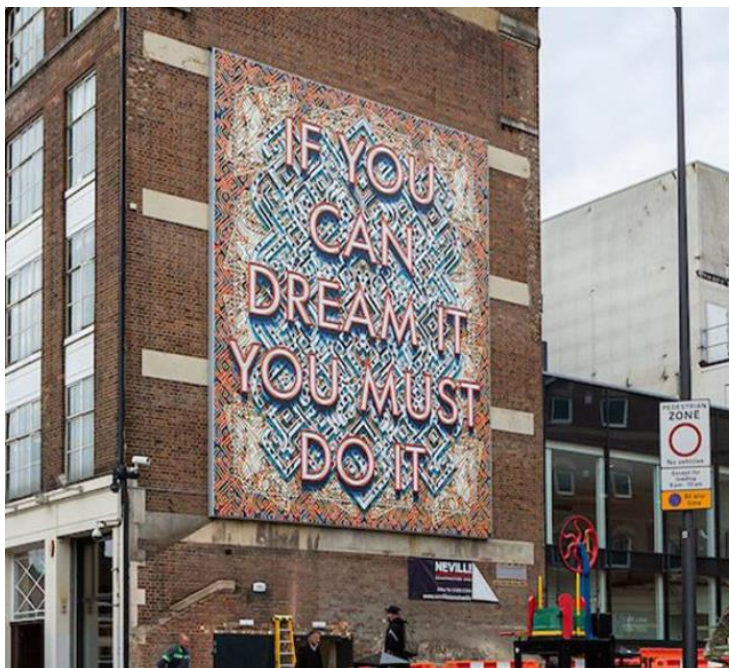


We would recommend considering wayfinding in detail through the Investment Strategy, employing a qualified highways engineer familiar with the TSRDG regulations.

#### 7.5 Other Recommendations:

Through the Investment Strategy, consider options to make Fitzleet more attractive to visitors. This could include aesthetic improvements to the west facing façade (for example a reasonably low-cost solution including public art), continuing to increase the number of larger parking spaces, and consideration of improvements to the exit ramp geometry (as set out in the Stage 1 Report).

Figure 25. Public Art overlooking a surface car park in Luton



As discussed in Section 7.2 the London Rd site presents opportunities to provide a range of different types of parking including coach, lorry and camping cars. A significant issue with encouraging higher use in London Road is the complex route from the main road network to the site.

Options for London Road should be considered through the Investment Strategy including:

- Changing the layout to give access to the Car Park from the Lorry / Coach section to improve the vehicle access to the long-stay site from Hotham Way (B2259)
- Formal tariffed provision for overnight stays for Camping Cars and Vans
- Other options that may arise during the feasibility.

Bognor Regis	Recommendations
<b>Town Centre</b>	Additional tariff bands for London Rd and Fittleeet to encourage longer stays in these sites.
<b>Seasonal</b>	Introduce a 3-hour tariff in West Park and remove the 'high peak' band from Gloucester Rd.
<b>Wayfinding</b>	As part of an Investment Strategy, improve wayfinding to Fittleeet MSCP (and London Rd if layout is changed).
<b>London Road</b>	Consider redesign of the layout to allow access to the car park from the B2259 and formalising overnight camping car stays as part of an Investment Strategy.
<b>Fittleeet MSCP</b>	Consider feasibility for aesthetic and layout changes to exit ramp as part of an Investment Strategy.
<b>Gloucester Road</b>	Following conversation with the other landowner, consider satisfying N/S pedestrian desire line and surfacing the southern section of the site in the Investment Strategy.

## 7.6 Littlehampton

The Littlehampton parking estate is less coherent than in Bognor Regis, consisting of a wide variety of site types. These range from typical town centre sites such as St Martins to unusual and difficult-to-manage sites such as River Road and West Beach.

### Site Specific comments

The layout of Surrey Street was highlighted as a potential problem but is complicated by private access and parking. It could be worth commissioning a redesign as part of the Investment Strategy, as this would likely cost very little. There is a double sign installed with directions to nearest alternative parking on Surrey Street near the entrance (photo in Stage 1 Report) which is probably superfluous.

West Green will form part of a wider seafront regeneration scheme<sup>15</sup>. The unsurfaced section of East Green could benefit from permeable protection grids to allow grass to grow but protect the surface from rutting.

<sup>15</sup> <https://www.arun.gov.uk/littlehampton-seafront-design-scheme/>

Figure 26. Example of permeable parking mesh credit: Expresspave / Shedbase



West Beach is an unusual site with complicated access and ownership with a variety of users (see diagram in Stage 1 Report). The complicated and unusual nature of these sorts of sites often make significant change too difficult or not cost effective. Additional passing places and spaces could be found if there is demand.

We were asked to consider the disused car park on Avon Rd which previously served a Waitrose, to provide additional capacity. Given that there is capacity on St Martins into the medium term, coupled with the likely value of the site, it would likely be more economical to consider adding a 'deck' to St Martins when capacity issues become a significant issue in the future. At present, we reported costs of around £25,000 per space for decked car parks are significantly higher than prices a few years ago. As prices fluctuate, a more precise figure should be sought when and if this is investigated.

### Mewsbrook

Mewsbrook is owned by ADC and important to the east of the seafront. It has a very generous 5-hour free parking scheme in place for visitors to the leisure centre, which could potentially be abused. The principle of a 5-hour stay should be reviewed, as a 3-hour stay should be ample for the large majority of leisure centre visitors. By comparison, the centre at Downham in Lewisham and that at Norwich Riverside allow 2.5 hours free parking. Visitor parking for special events requiring longer stays could be the subject of special arrangements. Staff parking is provided in a designated area.

Littlehampton	Recommendation
<b>Surrey Street</b>	Consider an engineering review and removal of the street clutter in an Investment Strategy.
<b>West Green</b>	Consider installing permeable ground protection grids on the unsurfaced section through an investment strategy to protect the grass and soil.
<b>St Martins</b>	Further to the future demand model in Section 3 consider options for increasing capacity when required. Digitisation will provide information for capacity.
<b>Mewsbrook</b>	Reduce the overly generous 5-hour visitor stays to 2.5 hours.



## 8. Delivery Strategy

Considering the national evidence base in Section 1 and the information in preceding sections we propose the following overall strategy to improving the off-street car parking estate and Arun's parking service below.

### Off-Street Parking Strategy 2021-2026

The Off-Street Parking Strategy (the 2021 Strategy) has been agreed and adopted as policy. The 2021 Strategy was reviewed in Stage 1 and remains the high-level strategy which this review aims to help achieve. It sets out a Vision for Parking:

#### ***"Our vision for parking***

*We will provide safe, well-maintained car parks that meet the needs of residents, shoppers and visitors to Arun, providing support for economic growth, promoting a sustainable environment and creating a positive parking experience."*

#### Key Issues

The work undertaken in the Stage 1 and Stage 2 Reports highlight a number of key issues that are standing in the way of achieving the vision in the 2021 Strategy. In summary these are:

#### Key Issues

Arun has poor information on their customers, and supply and demand for parking. Without hard data, decisions are opinion based, rather than evidence based.

Lack of digitisation means preparing for the future in a scientific way is very difficult, including responding to future demand, changes to enforcement legislation, and providing data both to allow customers to make choices on where parking is and where it is available and to allow professional management of the parking service.

Although a well-run service and in-line with other districts, enforcement is expensive as it requires CEOs to manually check if parking rights have been purchased by paper ticket, online, with a paper disc, or using an exemption through a Blue Badge. In some car parks this requires each and every car to be approached and scanned, or examination of the ticket or disc located on dashboard.

Complicated tariff structures could confuse visitors and do not offer sufficient options from a customer service point-of-view and cost money to enforce.

## Key Objectives

The key objectives are set out in the 2021 Strategy as below:

### Key Objectives

2021-2026 Strategy:

- investment in car parks through a planned **Investment Strategy** to ensure they are fit for the future.
- employment of enhanced technology and information to improve customer experience.
- appropriate management and charging structures to support vitality and economic growth.

The Action Plan will develop these Key Objectives, to support economic vitality of the towns, reduce the impact of cars on the environment and townscape and prepare for the future. Future opportunities and risks include ongoing information requirements and legislative changes, especially potential changes to enforcement.

## The Delivery Strategy

In summary, the overall strategy is proposed as below:

### Delivery Strategy

Delivering the 2021 Parking Strategy and supporting economic vitality **does not** mean free or cheap parking.

It **does** mean effective management which provides a Positive Parking Experience for customers and safeguards availability, turnover, site quality, and information. This will be done by:

- Moving to a fully digitised service to prepare for changes in technology and enforcement methods
- Policy decisions based on data and information, which can only be economically collected through digitisation
- Changes to tariffs and products which reflect the market
- Continuing to invest in the assets and deliver the Off-Street Parking Strategy 2021 – 2026.

Customers will see the benefits in:

- Streamlined, efficient payment options and fair enforcement
- Effective management and parking availability considering potential future demand growth
- New tariff bands and products tailored to their needs
- Continued investment in the condition and quality of their parking places.

Investment Strategy:

- As outlined in the 2021 Strategy, as a next step, consider the capital investments required to improve sites with an Investment Strategy
- To include engineering advice on the improvements to sites as identified above
- Consider wayfinding in detail
- Consider the financial, planning and practical feasibility of PV Solar Power canopies on car parks.

## 9. The Action Plan

Measure	Description	When	Resource / Cost
<b>Digitalisation of the service</b>			
Digitalisation	Adopt the Technology Strategy to reduce cash handling costs, gain better information and improve enforcement efficiency.	Year 1	<ul style="list-style-type: none"> <li>Self-financing through efficiencies in service and enforcement</li> </ul>
Positive Engagement	<ul style="list-style-type: none"> <li>Communications including; press briefing, communicating the benefits to the public, and engagement with users when changes are made</li> <li>Consider specific user groups with particular needs, e.g. people without access to debit cards / smartphones (for example through paypoint).</li> </ul>	Year 1	<ul style="list-style-type: none"> <li>Officer resource</li> <li>Assumed that any new card transaction charges will be fully compensated by savings in existing cash collection costs</li> </ul>
Systems	<ul style="list-style-type: none"> <li>Formalise the strategy to move towards a fully digitalised parking service including discs and permits</li> <li>Review disc types to ensure customer fit (e.g. local / tourist) and move towards mobile and payments systems</li> <li>Be aware of the DfT's National Parking Platform which could present customer service improvement opportunities.</li> </ul>	Year 1 Year 1 – 2 Ongoing	<ul style="list-style-type: none"> <li>Officer resource</li> </ul>
Equipment / Cashless	<ul style="list-style-type: none"> <li>Upgrade parking terminals in key sites to allow all payments to be cashless</li> <li>Begin to reduce the number of payment terminals with cash facilities.</li> </ul>	1 – 2 yrs 1 – 3 yrs	<ul style="list-style-type: none"> <li>c. £800 / terminal (1)</li> <li>Pro rate future savings in equipment replacement /maintenance costs</li> </ul>

<sup>1</sup> Capital cost depends on number of machines converted per batch (labour costs will reduce). Some additional software costs. Savings on maintenance, stationary & enforcement over the longer term.



Measure	Description	When	Resource / Cost
<b>Strategic Actions</b>			
Operations	<ul style="list-style-type: none"> <li>Discuss changes to KPIs with WSCC and Marstons.</li> <li>Annual Compliance surveys for off-street car parks additional to those for on-street</li> </ul>	Year 1 Annually	<ul style="list-style-type: none"> <li>£nil</li> <li>Approx. £400-800 per site<sup>(2)</sup></li> </ul>
Change parking tariff structure and charges	<ul style="list-style-type: none"> <li>Implement new tariffs, Off-street Parking Order and update signage and promotion</li> <li>Changes to off-street orders and on-street schedules where required</li> <li>Gradually move to more reduced target discounts for season tickets, with separate products between the towns.</li> </ul>	Year 1 1 – 2 yrs 1 – 5 yrs	<ul style="list-style-type: none"> <li>3% revenue improvement<sup>(3)</sup></li> <li>Officer Resource</li> <li>Expected positive revenue generation</li> </ul>
Parking policy areas	<ul style="list-style-type: none"> <li>Following increased digitalisation, monitor specific policies around Disc Parking, Blue Badges, Electric Vehicles, and Emissions Based Parking.</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>Subject to feasibility</li> <li>Blue badge, Slight positive revenue generation<sup>(4)</sup></li> </ul>

<sup>2</sup> Survey prices fluctuate, the cost will depend on scope, and economies of scale. Based on recent surveys, estimate around £400-800 per day per site.

<sup>3</sup> Tariff changes are difficult to accurately forecast with available data, but based on upon benchmarked car parks we have assume changes will increase revenue on affected by 3% using information from other sites we have.

<sup>4</sup> Assumed payments and potential increase churns will result in 1.5% increase in revenue based on savings elsewhere when BB holders pay as only long staying users will be affected.

Measure	Description	When	Resource / Cost
<b>Investment Strategy</b>			
Investment Strategy	<ul style="list-style-type: none"> <li>Consider opportunities presented by sites for improvement and capital investment, including the feasibility of projects with cost: benefit considerations</li> <li>Detailed wayfinding improvement plans and reduction of street clutter plans</li> <li>Littlehampton: Costs of improvements to East Green and West Beach in Littlehampton.</li> <li>Bognor: Consider aesthetic and circulation improvements to Fitzleet MSCP and options for making better use of the London Rd car park including camping-car provision.</li> </ul>	Year 1  Delivery 1 – 2 yr	<ul style="list-style-type: none"> <li>External experts approx. £30-50k depending on scope and level of detail. Higher budget will result in more detail.</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>Feasibility of PV canopies and greening of infrastructure</li> <li>Emissions Based Charging (implementation is dependent on digitalisation).</li> </ul>	Feasibility 1 – 2 yr	<ul style="list-style-type: none"> <li>External experts, cost depending on scope and level of detail.</li> </ul>

## 10. Glossary

ADC	Arun District Council	The local council responsible for off street parking provision covered by the Off-street Parking Order
ANPR	Automatic Number Plate Recognition	a technology that uses optical character recognition on images (usually a CCTV camera) to read vehicle registration plates
APDS	The Alliance for Parking Data Standards	A not-for-profit body that Develops, promotes, manages and maintains a uniform global standard to allow organisations to share parking data across platforms worldwide.
AVP	Automated or Autonomous Valet Parking	A system able to take control of a vehicle and to drive it from the drop-off zone to the parking space and from the parking space to the pick-up zone
BPA	British Parking Association	A not-for-profit organisation, representing, promoting and influencing the parking and traffic management profession throughout the UK and Europe
CEO	Civil Enforcement Officer	A person employed to enforce parking, traffic and other restrictions and laws in England & Wales.
CIHT	Chartered Institution of Highways & Transportation	A not-for-profit body that represents and qualifies professionals who plan, design, build, manage and operate transport and infrastructure.
CPE	Civil Parking Enforcement	'Decriminalised' parking enforcement carried out by councils rather than the Police under The Road Traffic Act 1991
DfT	Department for Transport	Government department responsible for national transport policy
ELT	Extract, Load, Transform	A data integration process for transferring raw data from a source server to a data warehouse on a target server and then preparing the information for downstream uses
EV	Electric Vehicles	Wholly electric or hybrid vehicles which are capable of being plugged in order to recharge batteries for electrically powered movement
GDPR	The General Data Protection Regulation	Regulation (EU) 2016/679 - a regulation in EU law on data protection and privacy for all individuals within the European Union (EU) and the European Economic Area (EEA).
	Intelligent deployment	The use of Business Intelligence methods to maximise CEO effectiveness. CEOs are deployed to locations based on the likelihood that vehicles are parked in contravention, based on previously gathered data
	Mobile Monitoring	The use of ANPR mounted on vehicles to monitor large numbers of vehicles in a short period of time.
MSCP	Multi-Storey Car Park	
ONS	Office of National Statistics	Government Agency charged with collection, analysis and publication of statistics.
P&D	Pay and display	A parking system in which a motorist buys a temporary permit from a machine and displays it in the window of the vehicle
PCN	Penalty Charge Notice	A fixed penalty notice issued by a CEO, backed with powers to obtain payment by civil action
PML	Parking Matters Ltd	
RFID	Radio-frequency identification	A system using electromagnetic fields to automatically identify, and track tags attached to objects. The tags contain electronically stored information. Oyster cards and contactless credit/debit cards are examples of this type of system
RVI	Retail Vitality Index	A national index published by Harper Dennis Hobbs, a leading retail consultant
SAE	Society of Automotive Engineers	A U.S.-based, globally active professional association and standards developing organization for engineering professionals in various industries. Principal emphasis

		is placed on transport industries such as automotive, aerospace, and commercial vehicles
SMMT	The Society of Motor Manufacturers & Traders	A trade association that supports and promotes the interests of the UK automotive industry at home and abroad. Working closely with member companies, SMMT acts as the voice of the motor industry, promoting its position to government, stakeholders and the media.
TEMPro	Trip End Modelling Programme	Standard software used in the UK to model future change in transport and travel demand.
TSRDG	Traffic Signs Regulations and General Directions	The TSRDG is the law that sets out the design and conditions of use of official traffic signs that can be lawfully placed on or near roads in Great Britain and the Isle of Man.
VMS	Variable Message Sign	A digital roadside sign which provides information to driver, in this context about parking availability
VRM	Vehicle Registration Mark	The mandatory alphanumeric registration mark of a vehicle, displayed on a vehicle registration plate
WSCC	West Sussex County Council	The local Highways Authority