

Gloucester City Council

Gloucester Car Parking Strategy

Report

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Version Control and Approval

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I Introduction

I.I Overview

- 1.1.1 LDA Design, Phil Jones Associates, and JLL are commissioned by Gloucester City Council to develop a city centre Car Parking Strategy. This strategy focuses on public car parking in the city centre.
- 1.1.2 Significant levels of development are expected in and around Gloucester city centre during the years to 2032. These include the redevelopment of several public city centre car parks, including NCP Bruton Way, Longsmith Street, and Ladybellegate Street.
- 1.1.3 The impacts of the potential redevelopments of these car parks needs to be assessed, and set against, the future growth in parking demand associated with other city centre development, and wider growth in the Joint Core Strategy (Gloucester, Cheltenham, and Tewkesbury) area.
- 1.1.4 Baseline data was collected for all public car parks run by Gloucester City Council, along with the main privately-operated car parks in the city centre. This included parking occupancy data, along with transaction data giving details such as duration of stay.
- 1.1.5 Following this, forecasts of future parking supply were made, using planning assumptions and discussions with officers at Gloucester City Council. This included temporary changes in parking supply, such as the forthcoming refurbishment of the Kings Walk car park. Forecasts of future demand were also made, using development assumptions and wider growth in the JCS area.
- 1.1.6 A variety of scenarios for the city centre have been assessed, on an annual basis for the five years 2018-2022, followed by assessments in five-year intervals to 2032. The assessment scenarios forecast the future parking requirements for the city centre area.
- 1.1.7 An appraisal of commercial perspectives is also provided. This includes an assessment of the existing charging regime and potential changes to the parking tariffs and the allocation of parking supply in the car parks run by Gloucester City Council.



2 Baseline

2.1 Parking Supply

2.1.1 Gloucester City Council runs 15 public car parks in the city centre area. In addition, there are a number of privately-operated car parks, including Gloucester Quays, and Gloucester Railway Station.

Parking Locations

- 2.1.2 The locations of car parks in the city centre are shown on the map included at **Appendix A**. The car parks form a mixture of multi-storey and surface level facilities, with multi-storey car parks at the Eastgate Centre, Gloucester Quays, Kings Walk, and Longsmith Street.
- 2.1.3 As shown on the map, the car parks run by Gloucester City Council are classed as being in one of three zones, with Zone 1 generally being the most central locations. Most of the car parks are found within a 10-minute walk of The Cross, except for Castlemeads, and Gloucester Quays.

Parking Capacity

- 2.1.4 The capacity of each car park, along with its zone and operator, is given in Table 2-1 overleaf. For the car parks not run by Gloucester City Council, a zone has been given based on the classification of nearby car parks.
- 2.1.5 In total, there are over 4,300 public car parking spaces (in off-street car parks) in the city centre. Car parks run by Gloucester City Council total, 2,151 spaces, or 50% of the city centre parking supply.
- 2.1.6 The second largest operator is Gloucester Quays, with 1,400 spaces, 33% of the parking supply. This is followed by NCP, which runs 509 spaces, 12% of city centre parking supply, and then Great Western Railway, which has 244 spaces (excluding the newly-opened Wessex House car park), or 6% of supply, at Gloucester Railway Station.
- 2.1.7 With the inclusion of the Wessex House car park, total capacity increases to 4,547 spaces, with Great Western Railway operating 11% of these.



Table 2-1: Parking Capacity in City Centre Public Car Parks

| Car Park | Capacity | Operator | Zone |
|----------------------------|----------|-------------------------|------|
| Castlemeads | 249 | Gloucester City Council | 3 |
| Eastgate Centre | 380 | Gloucester City Council | 1 |
| GL1 | 53 | Gloucester City Council | 3 |
| Gloucester Quays | 1400 | Gloucester Quays LLP | 3 |
| Gloucester Railway Station | 244 | Great Western Railway | 2 |
| Great Western Road | 56 | Gloucester City Council | 3 |
| Hampden Way | 72 | Gloucester City Council | 2 |
| Hare Lane North | 79 | Gloucester City Council | 3 |
| Hare Lane South | 97 | Gloucester City Council | 2 |
| Kings Walk | 290 | Gloucester City Council | 1 |
| Ladybellegate Street | 28 | Gloucester City Council | 1 |
| Longsmith Street | 300 | Gloucester City Council | 1 |
| NCP Blackfriars | 81 | NCP | 1 |
| NCP Bruton Way | 428 | NCP | 2 |
| North Warehouse | 66 | Gloucester City Council | 3 |
| Southgate Moorings | 179 | Gloucester City Council | 1 |
| St Michaels Square | 97 | Gloucester City Council | 2 |
| Station Road | 110 | Gloucester City Council | 2 |
| Westgate | 95 | Gloucester City Council | 2 |
| Total | 4304 | - | - |



- 2.1.8 When assessing the operation of car parks, an allowance of vacant spaces is usually made to allow for flexibility and periods of exceptional demand. For the purposes of this Car Parking Strategy, a Level of Service A (LoS A) has been set as 90% occupancy.
- 2.1.9 Car parks in Gloucester city centre have been allocated to zones. The total number of spaces in each zone is given in Table 2-2 below. The adjusted capacity, at LoS A, is also given for each zone.

| Zone | Capacity | % of City Centre Supply | LoS A Capacity |
|-------|----------|-------------------------|----------------|
| 1 | 1258 | 29% | 1132 |
| 2 | 1143 | 27% | 1029 |
| 3 | 1903 | 44% | 1713 |
| Total | 4304 | 100% | 3874 |

| Table 2-2: Parking Ca | pacity in City | v Centre Publ | ic Car Parks. | by Zone |
|-----------------------|----------------|----------------|----------------|---------|
| | pacity in city | y centre i ubi | ie eur r'urks, | by Lone |

2.1.10 Zone 1, the most central zone, accounts for 29% of city centre parking supply, with 27% of spaces being in Zone 2, and 44% in Zone 3. Adjusting for LoS A results in total car parking capacity being 3,874 vehicles, a reduction of 430 from the absolute capacity.

2.2 Data Sources

Parking Demand

- 2.2.1 To understand existing parking demand in the city centre, surveys were carried out during Autumn 2017. Snapshot surveys were undertaken twice per day, during the period 31 October to 6 November, for all of the car parks run by Gloucester City Council, along with NCP Blackfriars, and NCP Bruton Way.
- 2.2.2 Two periods are excluded from the survey analysis: it was not possible to record data during the Wednesday morning, and Sunday afternoon was not surveyed due to the relatively low levels of demand on a Sunday.
- 2.2.3 The survey data was supplemented by usage data provided by Gloucester Quays and Great Western Railway for the Gloucester Quays and Gloucester Railway Station car parks respectively.

2.3 Parking Demand

Total Occupancy

2.3.1 The total recorded parking occupancy, per period, is given in the graph at Figure 2-1 overleaf.



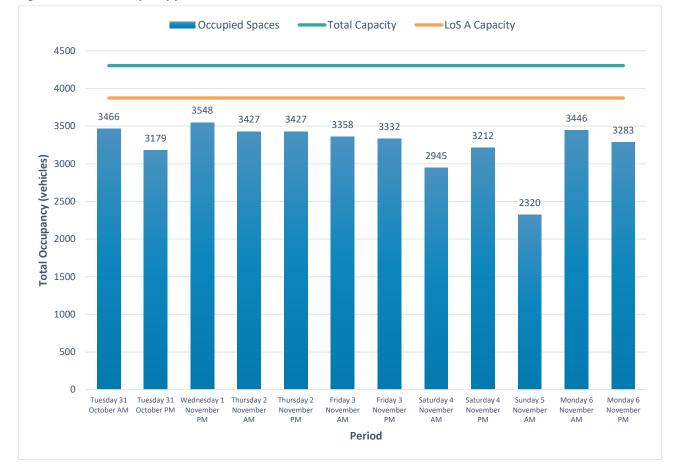
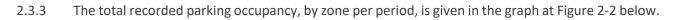


Figure 2-1: Total Occupancy per Period

2.3.2 The graph shows that total parking occupancy was relatively flat over the week, except for on the Sunday, during which significantly lower levels of occupancy were recorded. The data shows that the peak periods of parking demand were Wednesday PM during the weekday, and Saturday PM during the weekend.



Occupancy by Zone



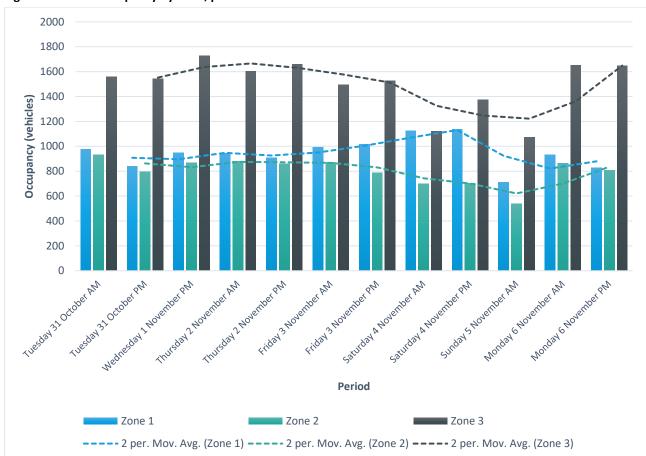


Figure 2-2: Total Occupancy by Zone, per Period

2.3.4 The graph shows that, across the week, parking occupancy in each zone was relatively flat, albeit with Zone 1 being most popular on the Saturday, and Zones 2 and 3 generally being busier on weekdays.

2.4 Parking Utilisation

Total Utilisation

2.4.1 Based on the recorded parking occupancy, and the capacity of each car park, the total parking utilisation, per period, is given in the graph at Figure 2-3 overleaf.



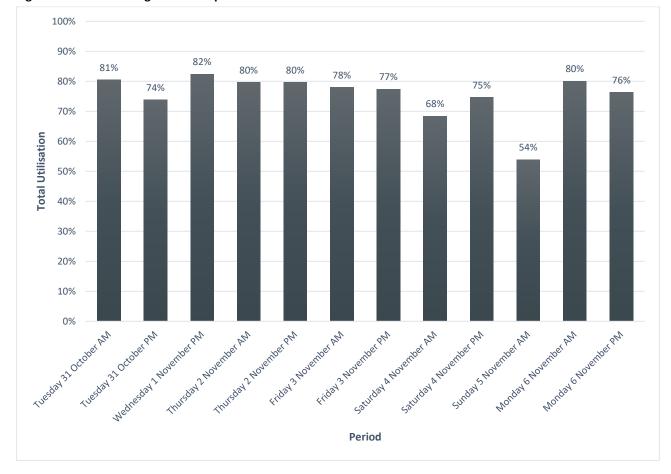
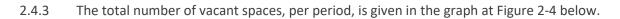


Figure 2-3: Total Parking Utilisation per Period

2.4.2 The graph shows that, at present, total parking utilisation in Gloucester city centre does not reach or exceed LoS A, with a highest recorded utilisation of 82% on the Wednesday afternoon. Total utilisation was slightly lower on the Saturday afternoon, at 75%.



Vacant Spaces



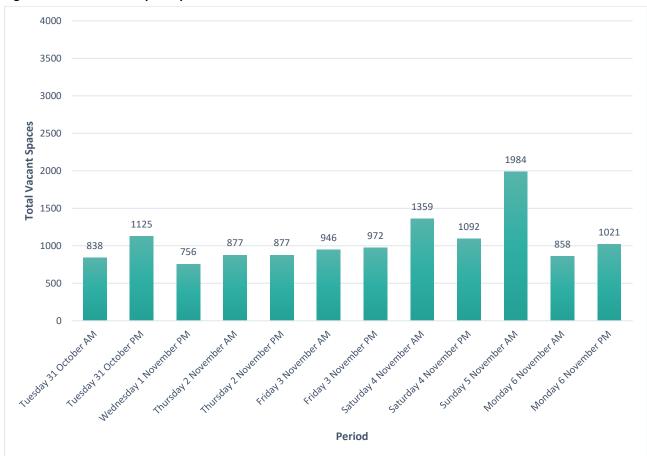


Figure 2-4: Total Vacant Spaces per Period

2.4.4 It is found that, there was spare capacity for at least 750 vehicles at all times. Adjusting for LoS A, this results in space capacity for at least 320 vehicles at all times, showing that there is slack at present.



Total Parking Utilisation by Zone, per Period



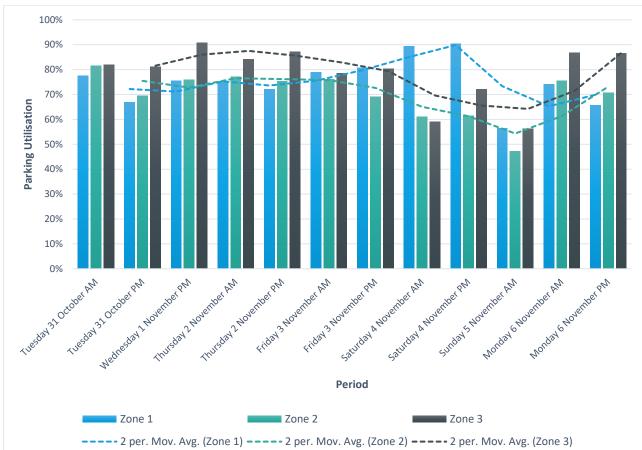


Figure 2-5: Total Parking Utilisation by Zone, per Period

2.4.6 The graph shows that LoS A (90% occupancy) was reached or exceed on two occasions. On the Wednesday afternoon, Zone 3 reached 91% occupancy, and on Saturday afternoon, Zone 1 reached 90% occupancy. On both occasions, there was spare capacity in the other zones.



Utilisation by Car Park

2.4.7 The mean rate of parking utilisation, by car park for the whole week, is shown in the graph at Figure 2-6 below.

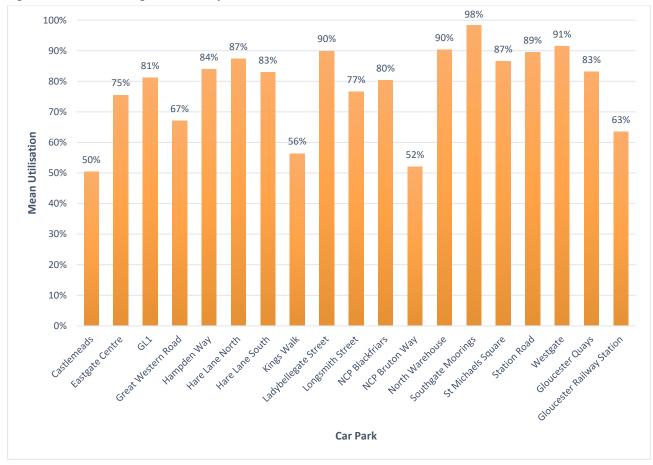


Figure 2-6: Mean Parking Utilisation by Car Park

2.4.8 The results show that some car parks are highly utilised across the week, with the following having utilisation rates of greater than or equal to 90%: Ladybellegate Street, North Warehouse, Southgate Moorings, and Westgate. In particular, Southgate Moorings had a mean utilisation of 98%, with, on average, three vacant spaces during each period.

2.5 On-Street Parking

- 2.5.1 There are around 775 on-street parking spaces in the Gloucester Central Permit Parking Zone. Parking transaction data was obtained from Gloucestershire County Council for the on-street spaces.
- 2.5.2 The data showed that on weekdays, the average number of transactions was 487, rising to 642 on a Saturday. This means that each on-street parking space had, on average, less than one transaction per day.



2.5.3 This suggests that on-street parking does not form a significant part of the paid-for parking mix in Gloucester city centre. This could be due to spaces being occupied by permit holders, or the tariff structure being unappealing compared with that of the off-street car parks.

2.6 Park and Ride

- 2.6.1 Boarding data was obtained from Stagecoach for the bus stop at the Waterwells Park & Ride, in the south of the city. The data showed that during the busiest weekday, 184 passengers boarded at the park and ride. On the Saturday, 139 did so.
- 2.6.2 Put into context, the car park has a capacity of 300 vehicles. On this basis, the usage of the park and ride seems low, particularly when compared to the overall parking occupancy in the city centre.



3 Future Forecasts

3.1 Parking Supply

3.1.1 Forecasts have been made of future parking supply in the city centre, based on strategic allocations, planning permissions, and discussions with officers. The modelled changes to parking supply are set out in Table 3-1 - Table 3-7 below.

| Assi | umptions by Car I | Park | Assumptions by Zone | | | |
|--------------|-------------------|----------------|---------------------|-------------------|--------------------------|--|
| Car Park | Zone | Parking Change | Zone | Parking Change | Notes | |
| Kings Walk | 1 | -290 | 1 | -290 | | |
| Wessex House | 3 | 243 | 2 | 0 | Kings Walk refurbishment | |
| | | | 3 | 243 | Wessex House reopens | |
| | | | Total | -47 | | |

Table 3-1: Modelled Changes to Parking Supply: 2018

Table 3-2: Modelled Changes to Parking Supply: 2019

| Assi | Assumptions by Car Park | | Assumptions by Zone | | |
|----------------|-------------------------|----------------|---------------------|-------------------|-----------------------|
| Car Park | Zone | Parking Change | Zone | Parking Change | Notes |
| Kings Walk | 1 | 290 | 1 | 290 | |
| NCP Bruton Way | 2 | -428 | 2 | -428 | Kings Walk reopened |
| | | | 3 | 0 | NCP Bruton Way closed |
| | | | Total | -138 | |

Table 3-3: Modelled Changes to Parking Supply: 2020

| Ass | umptions by Car I | Park | Assumptions by Zone | | | |
|-----------------------|-------------------|----------------|---------------------|-------------------|---|--|
| Car Park | Zone | Parking Change | Zone | Parking Change | Notes | |
| Kings Quarter MSCP | 2 | 350 | 1 | 0 | | |
| | | | 2 | 350 | Kinga Quarter MCCD anamad | |
| | | | 3 | 0 | Kings Quarter MSCP opened | |
| | | | Total | 350 | | |

Table 3-4: Modelled Changes to Parking Supply: 2021

| Assı | Imptions by Car I | Park | Assumptions by Zone | | | |
|------------------|-------------------|----------------|---------------------|-------------------|---------------------------|--|
| Car Park | Zone | Parking Change | Zone | Parking Change | Notes | |
| Longsmith Street | 1 | -300 | 1 | -300 | | |
| | | | 2 | 0 | | |
| | | | 3 | 0 | - Longsmith Street closed | |
| | | | Total | -300 | | |

Table 3-5: Modelled Changes to Parking Supply: 2022

| Assumptions by Car Park | | | Assumptio | ns by Zone | | |
|-------------------------|------|----------------|-----------|-------------------|-----------------------------|--|
| Car Park | Zone | Parking Change | Zone | Parking Change | Notes | |
| Ladybellegate Street | 1 | -28 | 1 | -109 | | |
| NCP Blackfriars | 1 | -81 | 2 | 0 | Ladybellegate Street closed | |
| | | | 3 | 0 | NCP Blackfriars closed | |
| | | | Total | -109 | | |



Table 3-6: Modelled Changes to Parking Supply: 2027

| | Assi | umptions by Car F | Park | Assumptions by Zone | | Notos | |
|----------|------|-------------------|----------------|---------------------|-------------------|--------------------|--|
| Car Park | | Zone | Parking Change | Zone | Parking Change | Notes | |
| | | | | 1 | 0 | | |
| | | | | 2 | 0 | | |
| | | | | 3 | 0 | No assumed changes | |
| | | | | Total | 0 | | |

Table 3-7: Modelled Changes to Parking Supply: 2032

| Assumptions by Car Park | | | Assumptio | ns by Zone | |
|-------------------------|------|----------------|-----------|-------------------|--------------------|
| Car Park | Zone | Parking Change | Zone | Parking Change | Notes |
| | | | 1 | 0 | |
| | | | 2 | 0 | |
| | | | 3 | 0 | No assumed changes |
| | | | Total | 0 | |

- 3.1.2 In summary, it is assumed that Kings Walk would be refurbished in 2018, with the temporary loss of 290 spaces. Meanwhile, Wessex House would reopen with a gain of 243 spaces. Following this, in 2019, Kings Walk would reopen, with a gain of 290 spaces, whilst NCP Bruton Way would close, with a loss of 428 spaces.
- 3.1.3 Then in 2020, the new Kings Quarter Multi-storey Car Park would open, a gain of 350 spaces. In 2021, Longsmith Street would close, losing 300 spaces. This would be followed by the closures of Ladybellegate Street and NCP Blackfriars in 2022, totalling 109 spaces.
- 3.1.4 No assumptions have been made for the long-term, i.e. 2027 and 2032.

3.2 Parking Demand

3.2.1 To forecast future parking demand in Gloucester city centre, growth related to two factors has been included in the modelling. Firstly, background growth was derived from TEMPro. Secondly, parking demand directly associated with city centre site allocations was added.

Background Growth

- 3.2.2 Background growth in parking demand was forecast using growth factors derived from TEMPro, with Gloucester city centre as a car driver destination. Following the adoption of the Gloucester, Cheltenham, and Tewkesbury Joint Core Strategy (JCS) in December 2017, the TEMPro forecasts were revisited to ensure that development assumptions remained current.
- 3.2.3 It was found that, in the Gloucester, Cheltenham, and Tewkesbury areas, TEMPro assumed growth of 18,670 households and 11,414 jobs to 2031. This compared with 35,175 households and 39,500 jobs in the JCS. Consequently, the TEMPro assumptions have been factored upwards to meet the latest JCS targets.
- 3.2.4 As the parking demand associated with new jobs in the city centre (retail, leisure, and office land uses) is modelled by this parking strategy through the site allocations, the increase in background growth was adjusted for households only.
- 3.2.5 The resulting background growth factors are set out at Table 3-8 below.

| Period | Average Weekday | Average Saturday |
|-----------|-----------------|------------------|
| 2017-2018 | 1.0177 | 1.0168 |
| 2017-2019 | 1.0354 | 1.0336 |
| 2017-2020 | 1.0532 | 1.0504 |
| 2017-2021 | 1.0710 | 1.0672 |
| 2017-2022 | 1.0815 | 1.0777 |
| 2017-2027 | 1.1331 | 1.1294 |
| 2017-2032 | 1.1817 | 1.1766 |

Table 3-8: Adjusted Background Growth Factors

Development Demand

3.2.6 Parking demand generated by development in the city centre was forecast using trip rates obtained from TRICS. The trip rates allowed a forecast of trip generation to be made, from which parking accumulation could be calculated.



3.2.7 The development assumptions made for site allocations in the city centre are set out in Table 3-9 below. The assumptions are based on planning policy, and discussions with officers at Gloucester City Council.

Table 3-9: Development Assumptions

| Development | Site Allocation | Allocation Quanta (GFA) | | |
|--|-----------------|---|--|--|
| Kings Quarter | SA15 | 3,333 m² restaurant 3,333 m² hotel 3,333 m² office | 2020 2021 2022 | |
| Greater Blackfriars | SA16 | 1,200 m ² pub/restaurant 1,200 m ² restaurant 300 m ² retail | 2022 (all land uses) | |
| Land adjacent to Eastgate Shopping Centre | SA19 | 1,667 m² pub/restaurant 1,667 m² restaurant 1,667 m² retail | 2022 (50% of all land uses) 2027 (100%) | |

- 3.2.8 For Kings Quarter, it has been assumed that Phase 1, with an opening year of 2020, would predominantly include restaurant uses; Phase 2, with an opening year of 2021, would include hotel uses; and Phase 3, with an opening year of 2022, would include office uses.
- 3.2.9 No phasing has been assumed for Greater Blackfriars, with a forecast opening year of 2022. At Land Adjacent to Eastgate Shopping Centre, it is assumed that 50% of the development would open in 2022, with the rest open by 2027.
- 3.2.10 For residential development in the city centre, it is assumed that parking for residents would be included on-plot, or developments would be car-free; therefore, residential car parking would not be accommodated in public car parks.

Future Parking Demand

3.2.11 The resulting future parking demand is set out in Table 3-10 below.

| Table 3 | 8-10: | Future | Parking | Demand |
|---------|-------|--------|---------|--------|
|---------|-------|--------|---------|--------|

| Year | Baseline / Baseline with Background Growth | | Developme | ent Demand | Total Demand | | |
|------|---|----------|-----------|------------|--------------|----------|--|
| | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | |
| 2017 | 3,548 | 3,212 | 0 | 0 | 3,548 | 3,212 | |
| 2018 | 3,611 | 3,266 | 0 | 0 | 3,611 | 3,266 | |
| 2019 | 3,674 | 3,320 | 0 | 0 | 3,674 | 3,320 | |



| Year | Baseline / Baseline with Background Growth | | Developme | nt Demand | Total Demand | | |
|------|---|----------|-----------|-----------|--------------|----------|--|
| | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | |
| 2020 | 3,737 | 3,374 | 52 | 47 | 3,789 | 3,421 | |
| 2021 | 3,800 | 3,428 | 61 | 63 | 3,861 | 3,491 | |
| 2022 | 3,837 | 3,462 | 189 | 248 | 4,026 | 3,710 | |
| 2027 | 4,020 | 3,628 | 215 | 329 | 4,235 | 3,956 | |
| 2032 | 4,193 | 3,779 | 215 | 329 | 4,408 | 4,108 | |

- 3.2.12 Over the whole strategy period, 2017-2032, it is forecast that total parking demand in Gloucester city centre will increase by around 900 vehicles on both a weekday and a Saturday. On the weekday, demand for around 200 spaces is associated with development, whilst on the Saturday this increases to around 300 spaces, a reflection of the leisure-oriented land uses.
- 3.2.13 Background growth accounts for an increase in around 650 spaces on the weekday, and around 550 on the Saturday.



4 Assessment

4.1 Overview

4.1.1 This chapter sets out the results of the assessment, based upon the assumed changes to parking supply and the forecast changes in parking demand. The results include an adjusted surplus or deficit at LoS A.

4.2 Results

- 4.2.1 The results of the modelling are set out in Table 4-1 overleaf. The assumptions for each year are summarised below:
 - 2018
 - Background growth to 2018
 - Kings Walk refurbishment
 - Wessex House reopening
 - 2019
 - Background growth to 2019
 - Kings Walk reopened
 - NCP Bruton Way closed
 - 2020
 - Background growth to 2020
 - Kings Quarter MSCP opened 350 spaces
 - Kings Quarter Phase 1
 - 2021
 - Background growth to 2021
 - Longsmith Street closed
 - Kings Quarter Phase 2
 - 2022
 - Background growth to 2022
 - Ladybellegate Street closed
 - NCP Blackfriars closed
 - Kings Quarter Phase 3
 - Eastgate Centre Phase 1
 - Greater Blackfriars

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- 2027
 - Background growth to 2027
 - Eastgate Centre Phase 2
- 2032
 - Background growth to 2032

Table 4-1: Modelling Results

| Zone | | Occupied Spaces (Parking Demand) | | Vacant Spaces | | Parking Utilisation | | Surplus or Deficit at LoS A | |
|-------|---------|-------------------------------------|---------|---------------|---------|---------------------|---------|-----------------------------|--|
| Lone | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | |
| | | | | 2017 | | | | | |
| 1 | 950 | 1136 | 308 | 122 | 76% | 90% | 182 | -4 | |
| 2 | 869 | 703 | 274 | 440 | 76% | 62% | 160 | 326 | |
| 3 | 1729 | 1373 | 174 | 530 | 91% | 72% | -16 | 340 | |
| Total | 3548 | 3212 | 756 | 1092 | 82% | 75% | 326 | 662 | |
| | | · | · | 2018 | | · | · | ' | |
| 1 | 967 | 1155 | 1 | -187 | 100% | 119% | -96 | -284 | |
| 2 | 884 | 715 | 259 | 428 | 77% | 63% | 144 | 314 | |
| 3 | 1760 | 1396 | 386 | 750 | 82% | 65% | 172 | 535 | |
| Total | 3611 | 3266 | 646 | 991 | 85% | 77% | 220 | 565 | |

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| Zone | Occupied Spaces (Parking Demand) | | Vacant Spaces | | Parking Utilisation | | Surplus or Deficit at LoS A | |
|--------------------|-------------------------------------|----------|---------------|----------|---------------------|----------|-----------------------------|----------|
| 20110 | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday |
| | | | | 2019 | | | | |
| 1 | 984 | 1174 | 274 | 84 | 78% | 93% | 149 | -42 |
| 2 | 900 | 727 | -185 | -12 | 126% | 102% | -256 | -83 |
| 3 | 1790 | 1419 | 356 | 727 | 83% | 66% | 141 | 512 |
| Total | 3674 | 3320 | 445 | 799 | 89% | 81% | 33 | 387 |
| | · | · | · | 2020 | · | | · | |
| 1 | 1001 | 1193 | 257 | 65 | 80% | 95% | 132 | -61 |
| 2 | 967 | 785 | 98 | 280 | 91% | 74% | -9 | 173 |
| 3 | 1821 | 1442 | 325 | 704 | 85% | 67% | 110 | 489 |
| Total | 3789 | 3421 | 680 | 1048 | 85% | 77% | 233 | 602 |
| Continued overleaf | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

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| Zone | Occupied Spaces (Parking Demand) | | Vacant Spaces | | Parking Utilisation | | Surplus or Deficit at LoS A | |
|--------------------|---------------------------------------|----------|---------------|----------|---------------------|----------|-----------------------------|----------|
| 20112 | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday |
| | | | | | | | | |
| | | | | 2021 | | | | |
| 1 | 1017 | 1212 | -59 | -254 | 106% | 127% | -155 | -350 |
| 2 | 991 | 814 | 74 | 251 | 93% | 76% | -33 | 145 |
| 3 | 1852 | 1465 | 294 | 681 | 86% | 68% | 80 | 466 |
| Total | 3861 | 3491 | 308 | 678 | 93% | 84% | -108 | 261 |
| | | | | 2022 | | | | |
| 1 | 1053 | 1305 | -204 | -456 | 124% | 154% | -289 | -541 |
| 2 | 1103 | 925 | -38 | 140 | 104% | 87% | -145 | 33 |
| 3 | 1870 | 1480 | 276 | 666 | 87% | 69% | 61 | 452 |
| Total | 4026 | 3710 | 34 | 350 | 99% | 91% | -372 | -56 |
| Continued overleaf | · · · · · · · · · · · · · · · · · · · | | | | | | | 1 |

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Gloucester Car Parking Strategy



| Zone | Occupied Spaces (Parking Demand) | | Vacant Spaces | | Parking Utilisation | | Surplus or Deficit at LoS A | |
|-------|-------------------------------------|----------|---------------|----------|---------------------|----------|-----------------------------|----------|
| | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday |
| | | | | 2027 | | | | |
| 1 | 1128 | 1444 | -279 | -595 | 133% | 170% | -364 | -680 |
| 2 | 1148 | 961 | -83 | 104 | 108% | 90% | -189 | -3 |
| 3 | 1959 | 1551 | 187 | 595 | 91% | 72% | -28 | 381 |
| Total | 4235 | 3956 | -175 | 104 | 104% | 97% | -581 | -302 |
| | | | | 2032 | | | | |
| 1 | 1174 | 1498 | -325 | -649 | 138% | 176% | -410 | -734 |
| 2 | 1190 | 995 | -125 | 70 | 112% | 93% | -232 | -36 |
| 3 | 2043 | 1615 | 103 | 531 | 95% | 75% | -112 | 316 |
| Total | 4408 | 4108 | -348 | -48 | 109% | 101% | -754 | -454 |

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- 4.2.2 The results show that it is possible to close the Kings Walk car park for refurbishment in 2018 and maintain surplus parking capacity. It is also found that, in the short-term, it is possible to close NCP Bruton Way prior to a new car park opening at Kings Quarter.
- 4.2.3 The results show that the expected changes to parking supply are able to accommodate the forecast increases in parking demand until 2022, with a small surplus of 34 spaces on a weekday, increasing to 350 spaces on a Saturday. However, with LoS A applied, this becomes a deficit of 372 spaces on the weekday, and 56 spaces on the Saturday.
- 4.2.4 With LoS A applied, there is forecast to be a deficit in city centre car parking from 2021 onwards. However, this is dependent on several assumptions, as previously outlined. For example, development that is included in this study may not come forward, or car parks earmarked for closure may not be closed. It should also be noted that LoS A might not be factored by commercial parking operators when making investment decisions.
- 4.2.5 The results of the modelling assume that a car park of 350 spaces would be delivered at Kings Quarter. If a larger car park was delivered, the forecast deficit from 2022 (at LoS A) or from 2027 (no LoS) would be reduced.
- 4.2.6 As no absolute deficit is forecast until 2027, it is recommended that the strategy is revisited over the next five years to understand whether growth in parking demand has occurred, and to include up to date development assumptions.
- 4.2.7 It would be risky to invest in a new car park (in addition to Kings Quarter) on the basis of a forecast deficit in nine years' time. However, it is clear that a new car park is needed at Kings Quarter to cater for parking demand to 2022. This car park should have a capacity of at least 350 spaces.
- 4.2.8 It should be noted that the existing NCP Bruton Way car park has a capacity of 428 spaces therefore a new car park at Kings Quarter with capacity of 350 spaces would be a net loss of 78 spaces. Any transport assessment submitted in support of a planning application for the new car park should demonstrate that impacts of this loss would not be severe.
- 4.2.9 If, following monitoring, it is found that further car parking capacity is needed in the future, options to increase capacity should be explored, such as decking of the Westgate car park, along with ways to make better use of infrastructure, such as the Waterwells Park & Ride. No account has been taken of any variation in the use of the park and ride, which is currently underutilised.



5 Commercial Perspectives

5.1 Overview

- 5.1.1 As stated in the preceding results section an on-going review of car parking capacity is essential. We recommend that capacity is reviewed annually and/or also at the point of substantial change in provision i.e. demolition of Longsmith Street MSCP.
- 5.1.2 The capacity assessment conducted as part of this strategy provides a forecast of surplus spaces based on background growth plus specific development assumptions. It provides results based on two scenarios. Firstly, that capacity is reached when 100% of available spaces are in use, and secondly where capacity is reached when 90% of spaces are occupied.
- 5.1.3 We consider that the correct trigger for action by the Council is when the 90% level of service is reached (predicted to occur between 2021 and 2022). However new provision, of which Westgate is the preferred option followed by Southgate Moorings, does not need to be in place until absolute capacity is reached (estimated by end of 2027). This assumes that the various assumptions underpinning the capacity assessment are achieved (including improvements to Kings Walk car park and delivery of a new MSCP at Kings Quarter).
- 5.1.4 We comment on individual car parks below:

5.2 Kings Walk

5.2.1 A very central parking facility, key to supporting the vitality of the retail centre. Currently underutilised, hampered particularly by accessibility and signage. We consider that the proposed improvements to this car park are a very positive action.

5.3 Wessex House (Network Rail)

5.3.1 This recently-opened surface car park of approximately 240 spaces is focussed on serving rail passenger demand (and may also prove attractive to staff and patients/visitors of the hospital). Pedestrian accessibility which is currently via a very poor underpass is planned to be considerably enhanced within the next three years. Subject to future demand there is potential to deck this service car park and deliver additional capacity (subject to relevant consents).



5.4 NCP Bruton Way and Proposed Kings Quarter MSCP

- 5.4.1 The current NCP car park is understood to be underutilised and in poor structural condition. The proposed new Kings Quarter MSCP will provide a significantly enhanced provision supporting both long and short stay users including rail commuters, key workers, the bus station, and the retail centre. The proposed new MSCP will be strategically located to serve access into the city centre from the east.
- 5.4.2 The existing Bruton Way car park is occupied by NCP under a lease. We understand that discussions have taken place with NCP reference surrender of their existing lease plus negotiation of terms for a new lease on the proposed Kings Quarter MSCP. We consider in order for the Council to mitigate development risk associated with delivery of this new car park, that an appropriate lease to NCP is very important and should therefore be prioritised as a key action

5.5 Longsmith Street MSCP

5.5.1 We understand that this car park is in poor structural condition and that the Council intend to demolish this facility and develop the site for alternative uses. We note that the site could be temporarily used for surface parking (circa 60 spaces) prior to any redevelopment commencing where required.

5.6 Westgate Street

5.6.1 In addition to Kings Quarter we firmly believe that this is the correct site to provide additional parking provision. It is located on the ring road with good accessibility. Indicative plans demonstrate a split use between coach and car parking. A strategic car park in this location would enhance pedestrian flow into the city along Westgate Street and boost vitality. However, it is vital that there is proven demand before any investment decision is made and delivery of any new facility should endeavour to correspond to an otherwise absolute parking capacity issue.

5.7 Southgate Moorings

5.7.1 We recognise the value of this surface car park to the Council with its high utilisation and revenue. The car park certainly has the potential to be developed which could incorporate an under-croft car park and so preserve some parking capacity and revenue at this location. Alternatively, in a similar vein to Westgate Street, a decked car park could be developed on this site once the trigger is met to provide additional parking capacity to meet demand across the city centre.

5.8 Other Matters

5.8.1 We also note the following:



- During the commission a supplementary review was recommended to map the duration of stay across the central car parks to ensure that they were optimally focussed. To enable this to be undertaken ticket sales data is required. However, to date this has not been available (save for barrier-controlled car parks Eastgate and Kings Walk). We still firmly believe this is an important exercise to undertake to help set the wider parking strategy across the city and recommend obtaining the necessary data (which may require further car park surveys).
- Should there be a change in the structure of car parks i.e. changing the balance of short and long stay parking, or any change in the tariff themselves, this may impact the parking demand across the city within the three zones and hence may necessitate a further review of the findings of the capacity assessment.
- In addition, as part of the commission we recommend that the Council liaise closely with the County Council in relation to the upgrade of existing on street digital variable message signage; the purpose of which is to assist customers with navigation to car parks as well as showing space availability. The county is currently in the process of obtaining quotes for the systems upgrade and we recommend the council liaises closely once this data is received.



6 Conclusions and Recommendations

6.1 Conclusions

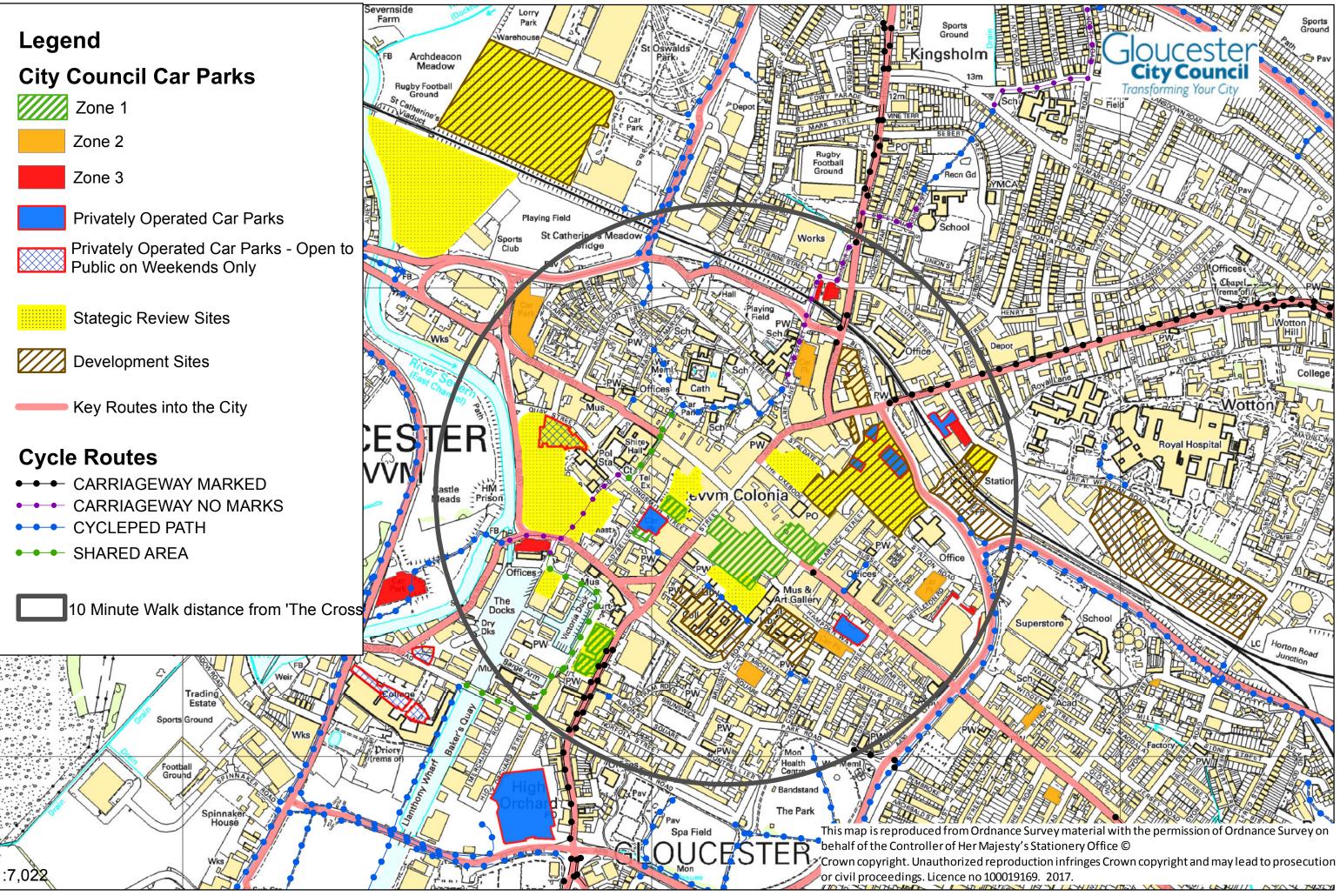
- 6.1.1 This parking strategy was commissioned by Gloucester City Council to give an assessment of city centre car parking to 2032 in the context of significant levels of planned redevelopment in the area. The impacts of the parking demand of these developments has been assessed, along with planned changes to parking supply in the city centre.
- 6.1.2 Baseline data was collected in the Autumn of 2017; this recorded parking occupancy over a oneweek period. It was found that total parking occupancy is relatively flat during the week, with the car parks, as a whole, not reaching LoS A, defined as 90% occupancy. It was found that mean parking utilisation varies significantly between car parks, which can be related to the size of the car parks or their relative popularity.
- 6.1.3 Forecasts have been made of future parking supply in the city centre; these were based on strategic allocations, planning permissions, and discussions with officers. Parking demand was forecast for two factors: site allocations in the city centre, and demand associated with background growth. For the site allocations in the city centre, it was assumed that residential development would provide parking on-plot.
- 6.1.4 The assessment of future scenarios has found that a surplus of parking spaces, with no LoS, is forecast until 2022. Following this, a deficit is forecast from 2027 onwards. Adjusting for LoS A, a deficit in parking is forecast from 2021. The forecasts assume that a new multi-storey car park of at least 350 spaces is delivered at Kings Quarter by 2020.
- 6.1.5 In addition to the new car park at Kings Quarter, there is potential to deliver a new car park at Westgate. This could be seen as a longer-term project that could be delivered around 2027 if a deficit in car parking does occur. The overall strategy is mapped on the plan at **Appendix B**.

6.2 **Recommendations**

- 6.2.1 The following key recommendations are made by this Car Parking Strategy:
 - A new multi-storey car park with a capacity of at least 350 vehicles should be delivered at Kings Quarter.
 - The parking strategy should be reviewed annually to reflect changes in observed parking demand, and development assumptions.
 - A full review of parking tariffs in the city centre should be undertaken to establish the potential for better management of the car parks.
 - Other options, such as better utilisation of Park & Ride, should be explored by the Council.

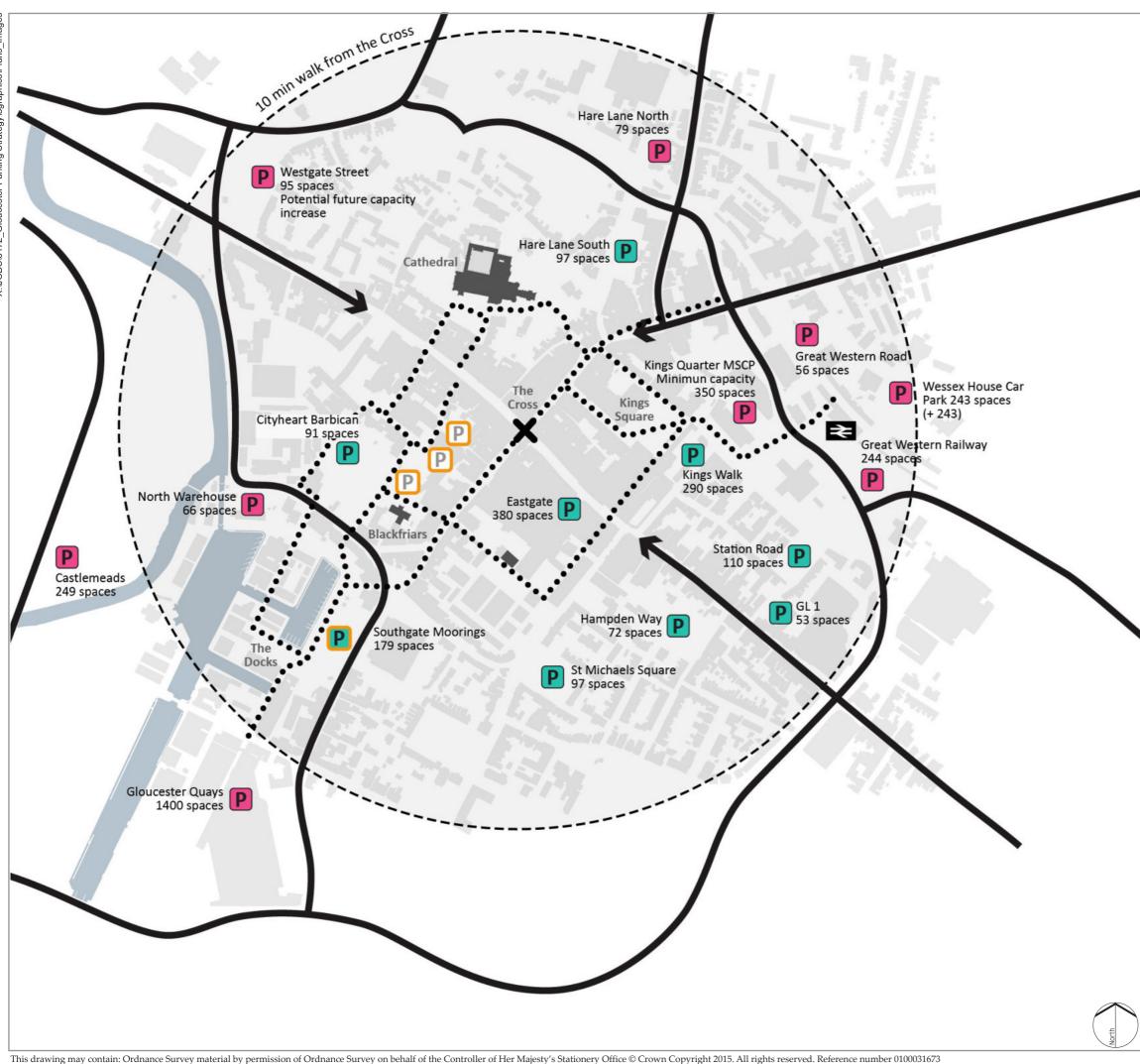


Appendix A Parking Locations





Appendix B Parking Strategy



OS Open data / @ Natural England / @ DEFRA / @ DECC / @ English Heritage. Contains Ordnance Survey data @ Crown copyright and database right 2015 | Aerial Photography - World Imagery: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USCS, AeroGRID, IGN, and the GIS User Community

LEGEND



Short stay car park

Long & short stay car park

Removed car park

Redevelopment opportunity

Key vehicle routes to the City Centre

Key pedestrian routes in the City Centre

LDĀDESIGN

PROJECT TITLE GLOUCESTER PARKING STRATEGY

DRAWING TITLE Parking Strategy

ISSUED BY DATE SCALE@A3 STATUS

Exeter Jan 2018 NTS Draft

T: 01392 260430 DRAWN SBe EC CHECKED EC APPROVED

DWG. NO. 6172_012

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