



# GCP Residents Parking

<b>DATE:</b>	17 October 2022	<b>CONFIDENTIALITY:</b>	Public
<b>SUBJECT:</b>	Residents Parking Survey Results (Hurst Park & Elizabeth)		
<b>PROJECT:</b>	GCP Residents Parking	<b>AUTHOR:</b>	Russell Howles
<b>CHECKED:</b>	George Parker	<b>APPROVED:</b>	Mehmet Ahmet

## BACKGROUND

Currently, there are 23 resident's permit parking schemes in place across Cambridge. However, on the 4th November, the Cambridgeshire County Council (CCC) Highways and Transport Committee agreed to restart delivery of additional schemes and requested that the Greater Cambridge Partnership (GCP) initiate delivery of new residents' parking schemes, across the city of Cambridge.

As a result, GCP have commissioned WSP to undertake a study investigating parking controls including Residents' Parking Schemes in Cambridge in areas where parking is currently unregulated.

The work will sit alongside the development of an Integrated Parking Strategy as well as the wider City Access programme, including the proposals set out in the Making Connections consultation undertaken in autumn 2022.

Residents Parking aligns with City Deal ambitions to reduce congestion and improve sustainable travel options, and the Mayor's objectives, as set out in the emerging LTCP.

This technical note serves as a follow-up to the Residents Parking Delivery Plan Report which was issued by GCP in Spring 2022. It aims to highlight the results of the additional parking beat surveys which were required in the scheme areas of "Hurst Park" and "Elizabeth" to examine existing parking stress and determine to what extent key parking areas should still be delivered as part of Tranche 1.

## INTRODUCTION

As part of the indicative Residents Parking Delivery Plan, the city of Cambridge was split up into three area categories. Existing residents' parking scheme areas, priority delivery areas, and areas for which further review is required.

Priority delivery areas (Tranche 1), such as Hurst Park and Elizabeth were identified for a number of reasons, including:

- Acute parking issues with obstruction to footways;
- Observed on-street parking pressure;
- High level of engagement feedback;
- Safety issues;
- Deliverability/ councillor support;
- Proximity to local facilities and services; and
- Proximity to / interaction with other GCP schemes (Mill Road, Milton Road, Comberton Greenway).



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For all Tranche 1 schemes, it was decided that engagement with councillors and local residents should commence immediately. Whilst, in some areas, such as Hurst Park and Elizabeth, additional parking beat surveys would be needed to provide more detailed analysis of parking behaviours.

This Technical Note aims to highlight the results of the additional parking beat surveys conducted across Hurst Park and Elizabeth to examine existing parking stress and determine to what extent key parking areas should still be delivered as part of Tranche 1.

## METHODOLOGY

To examine parking stress, parking beat surveys were conducted between the 10<sup>th</sup> – 14<sup>th</sup> September 2022.

Two sources of data were collected. **Parking Supply** and **Parking Demand**.

Data was collected across both the weekend and weekday(s) at three key periods during the day.

### Parking supply

To determine parking supply, sections of road length which are permitted or acceptable for parking were measured and then converted into theoretical parking supply by dividing by the length of an assumed vehicle.

The result was then rounded down to the nearest unit, except when the remaining length is 90% or above and then it is rounded up.

Sections of road which are not legal or acceptable for parking (termed non-parking areas) were not included within the parking supply calculations.

### Parking demand

To determine parking demand, the number of vehicles parked within each section of road length were counted and converted to Passenger Car Units (PCU's) using the following PCU values.

<u>Vehicle</u>	<u>PCU Value</u>
Car	1
LGV	1
OGV	1.5
Bus	2



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In order to determine the potential user type of each vehicle, vehicles were counted at 3 key times during the day using their vehicle registration number for identification purposes:

- Morning: 10:00-12:00
- Afternoon: 15:00-17:00
- Overnight: 00:00-03:00

Vehicles observed overnight were classified as *residents*.

Vehicles observed during both the morning and afternoon were classified as *commuters*.

Vehicles observed at either the morning or afternoon were classified as *visitors*.

## Parking stress

Parking stress was then calculated to express the number of parked vehicles (parking demand) as a percentage of available parking (parking supply) for each parking type.

In theory, parking stress values should range between 0-100%. However, it is noted that parking stress values can be over 100% if vehicles are either small, parked closely together or if the length of the parking type is longer than the assumed vehicle length multiplied by the number of theoretical spaces. Parking stress values significantly over 100% may be an indicator of informal or illegal parking.

## RESULTS

The results of the additional parking beat surveys conducted within the scheme areas of Hurst Park and Elizabeth are outlined below. Both the existing parking supply as well as resultant parking stress are presented.

### Parking supply

Existing parking supply within the scheme areas of “Hurst Park” and “Elizabeth” are outlined below in **Table 1.0**.

A map showing the classification and distribution of parking spaces in each area has been provided in **Appendix A** for geographical context.



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**Table 1.0 – Parking Supply across Hurst Park and Elizabeth**

Road Section	Scheme Area	Parking Capacity (PCU's)
Arbury Road	Hurst Park	123
Highfield Avenue	Hurst Park	29
Highworth Avenue	Hurst Park	46
Hurst Park Avenue	Hurst Park	86
Leys Avenue	Hurst Park	35
Leys Road	Hurst Park	42
Milton Road (shops)	Hurst Park	7
Milton Road	Hurst Park/Elizabeth	22
Mulberry Close	Hurst Park	59
Orchard Avenue	Hurst Park	25
Chesnut Grove	Elizabeth	12
Chesterton Hall Crescent	Elizabeth	63
Chesterton Road	Elizabeth	5
Elizabeth Way	Elizabeth	0
George Street	Elizabeth	39
Hawthorn Way	Elizabeth	44
Herbert Street	Elizabeth	43
Milton Road (West)	Elizabeth	18
Off Hawthorne Way	Elizabeth	12
Springfield Road	Elizabeth	0

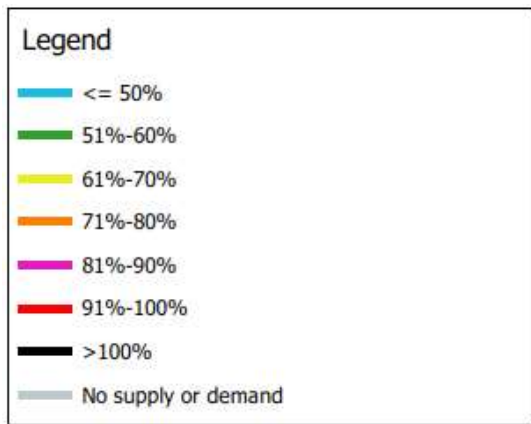
The scheme area of Hurst Park, including the northern side of Milton Road is noted to have a total parking supply of 463 PCU's. Whilst the scheme area of Elizabeth, including the southern side of Milton Road is noted to have a total parking supply of 247 PCU's

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## Parking Stress

For each scheme area, peak stress, as well as average weekday and weekend parking stress has been presented using the following key.



Where specific road sections, such as Milton Road, run along scheme area boundaries; the northern and southern sections have been assessed independently. Parking supply and parking stress on the northern side of Milton Road was attributed to Hurst Park, whilst the southern side was attributed to Elizabeth.

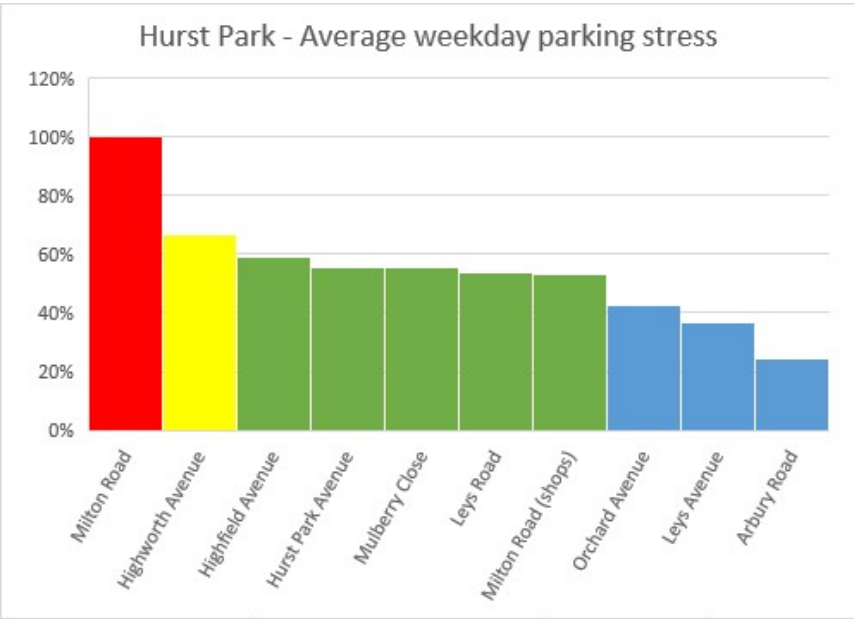
## Hurst Park

**Figure 1.0** shows average weekday stress across all road sections within Hurst Park. Whilst **Figure 1.1** show average weekend stress.

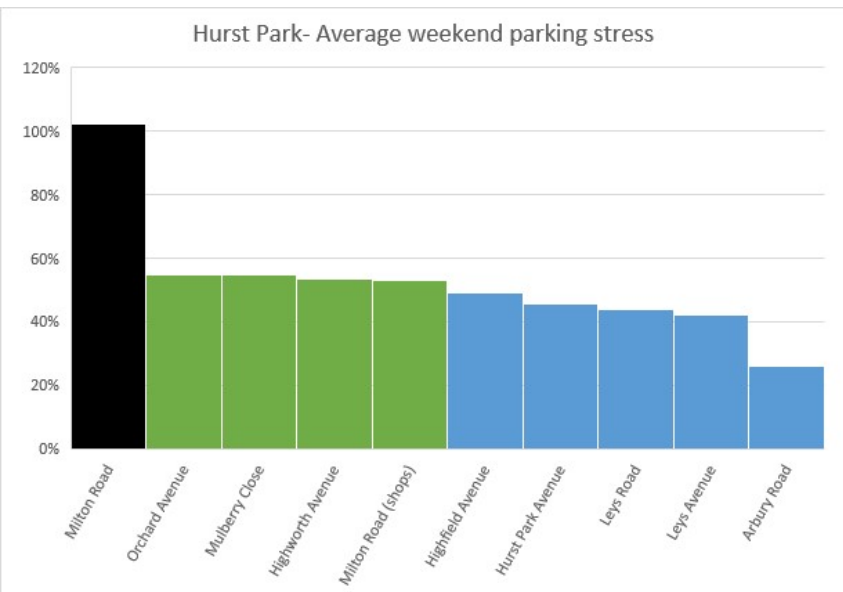
**Figure 1.0 – Average weekday parking stress: Hurst Park**

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**Figure 1.1 – Average weekend parking stress: Hurst Park**



Within the area of Hurst Park, there is only one road section shown to experience parking stress throughout the day, which is Milton Road.

Milton Road has an average weekday stress of 100% and an average weekend day stress of 102%, which peaks at around 110-120% in the afternoon between 15:00 -17:00.



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All other road sections within Hurst Park experience limited parking stress, with stress values <65% across both weekdays and weekends.

## Elizabeth

Figure 2.0 and Figure 2.1 below shows average weekday and average weekend stress across all road sections within Elizabeth.

Figure 2.0 – Average weekday parking stress: Elizabeth

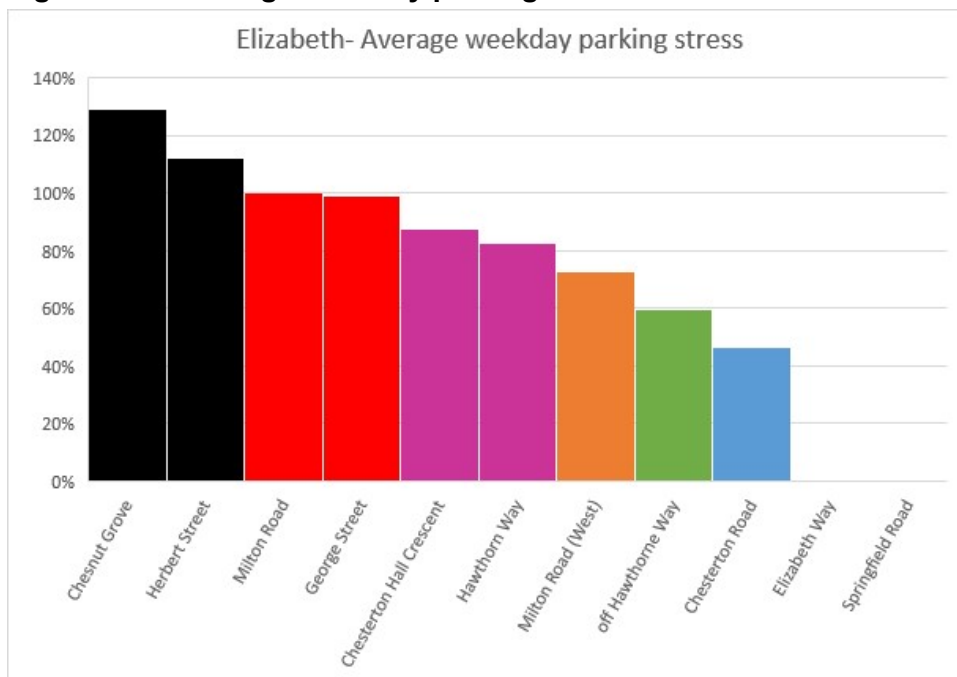
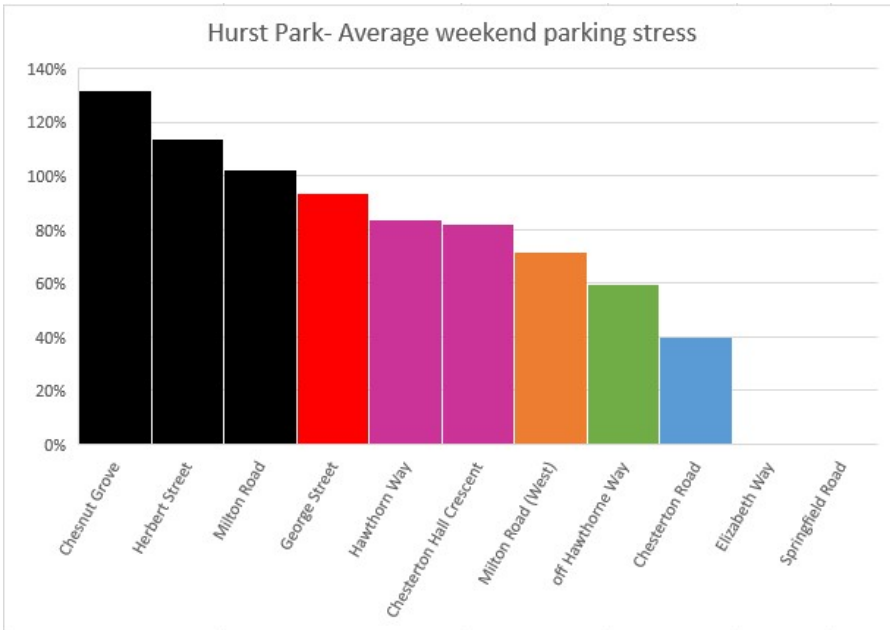


Figure 2.1 – Average weekend parking stress: Elizabeth



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Within the scheme area of Elizabeth, there is much more evidence of parking stress experienced throughout the day, than experienced in Hurst Park. This is largely due to the existing levels of parking supply.

Both Chesnut Grove and Herbert Street, for example, experience average stress levels of over 100% on both weekdays and weekends, which reach as high as 130-140% during peak periods.

This level of stress, experienced within the scheme area of Elizabeth, could be an indicator of informal or illegal parking.

Only Chesterton road, which has limited parking provision (5 spaces) seems to experience the lowest levels of parking stress, with an average parking stress <50%.

## CONCLUSIONS

Given the level of parking stress observed across Hurst Park, there is unlikely to be signs of informal or illegal parking.





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## APPENDICES

### Appendix A – Cambridge Parking Supply (Milton Area)

Cambridge Parking Surveys (Milton area) - Parking Supply

