Is there sufficient car parking capacity in Cheltenham?

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Introduction

In the UK, there were over thirty-five million cars registered for use on the road by the end of 2013 (Department of Transport, 2014). This has profound impacts on town planning on many issues, but perhaps none more so than on the issue of car parking.

In historic towns such as Cheltenham, traffic systems which were not designed to cope with volumes of motor traffic must adapt, or risk losing valuable income. Cheltenham town center already has 14 car parks. The aim of this project is to answer three key questions and these are:

- Are there sufficient spaces, even at peak times?
- Are car parking charges detrimental to visitor numbers?
- Is the traditional, fixed-period ticket system the best solution, for both motorists, and the town's inhabitants?

Methodology

Each car park was counted twice a day, in the morning between 0930 - 1100 and in the afternoon between 1500 - 1630, for a 7 day period. The data was collected using clicker counters, which is a fairly robust data collection method but quite time consuming. The number of spaces was then used to calculate the percentage of spare spaces. Secondary data was collected on other cities and towns to compare to the cost of parking in the centre.

Findings

- Cheltenham does not appear to have a parking capacity issue. The highest occupancy rate was 63% on Saturday morning, which left 1000 free spaces, while the lowest figure was 35%.
- Average weekday figures were 49% occupied in the mornings to 44% in the afternoon.
- The lowest was Beechwood Arcade at 20% occupancy - this figure is skewed by a doubling of occupancy on Saturday.
- Only 5 car parks had an average occupied capacity over 60%.
- Chelt Walk had a 94% average on weekdays. with an average of 74% occupancy over the whole week, suggesting a primarily commuter usage demographic.
- Car parks in the core of the central business district had a reduced levels of free space compared to those on the periphery.
- Data collected on Sunday showed low occupancy rates - however this was Remembrance Sunday so the data may have been affected by some of the town centre being closed off.

Table 1. Showing the percentage of occupied spaces, in all 14 of Cheltenham's town centre car parks, over a 7 day period.

Car Park	Capacity	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY		SATURDAY		SUNDAY		
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Town Centre East	452	36%	32%	36%	27%	36%	31%	35%	26%	30%	26%	34%	21%	4%	10%	**27%**
St James Place	202	58%	35%	57%	36%	58%	72%	39%	49%	42%	47%	68%	84%	24%	63%	**52%**
Bath Road	80	70%	40%	100%	51%	90%	80%	63%	50%	71%	54%	84%	26%	63%	43%	**63%**
Rodney Road	111	83%	57%	77%	63%	79%	67%	95%	79%	70%	55%	66%	59%	67%	52%	**69%**
NCP - Brewery	360	75%	71%	69%	58%	74%	67%	69%	58%	65%	66%	80%	71%	76%	69%	**69%**
High Street	126	96%	83%	94%	75%	88%	82%	100%	75%	85%	60%	86%	77%	81%	52%	**81%**
Beechwood	370	11%	16%	14%	24%	14%	18%	15%	19%	21%	25%	49%	40%	8%	6%	**20%**
Sherbourne Place	102	56%	45%	61%	59%	46%	52%	56%	47%	40%	37%	68%	54%	19%	15%	**47%**
Portland Street	329	11%	13%	39%	17%	20%	25%	22%	25%	23%	26%	72%	54%	6%	5%	**26%**
Chelt Walk	90	96%	83%	98%	88%	93%	90%	98%	93%	97%	97%	22%	53%	10%	13%	**74%**
Royal Well	47	68%	32%	60%	36%	51%	38%	40%	49%	40%	62%	74%	98%	36%	62%	**53%**
Chester Walk	100	84%	46%	90%	55%	61%	47%	87%	55%	74%	35%	60%	47%	54%	36%	**59%**
St Georges Road	116	51%	30%	48%	28%	63%	48%	57%	49%	28%	36%	31%	65%	24%	14%	**41%**
Regent Arcade	557	60%	39%	52%	39%	38%	36%	51%	49%	50%	61%	79%	93%	58%	62%	**55%**
TOTAL	**3042**	**51%**	**40%**	**53%**	**40%**	**47%**	**45%**	**49%**	**44%**	**45%**	**45%**	**63%**	**60%**	**35%**	**35%**	

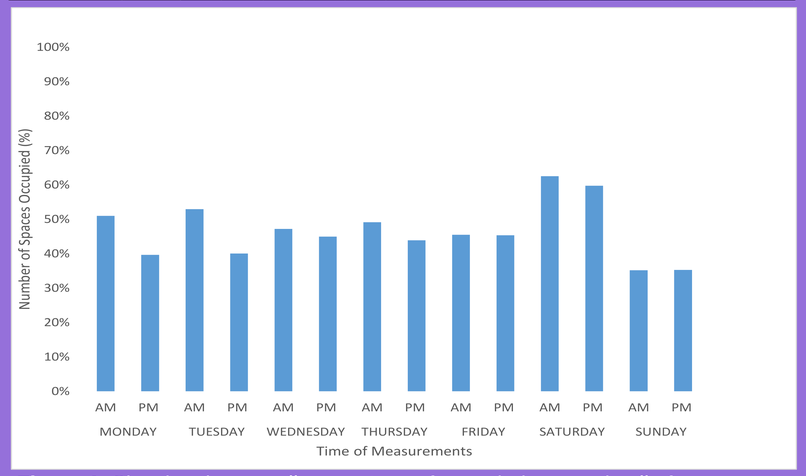

Figure 1. Showing the overall percentage of occupied spaces in all of Cheltenham town centre car parks combined.

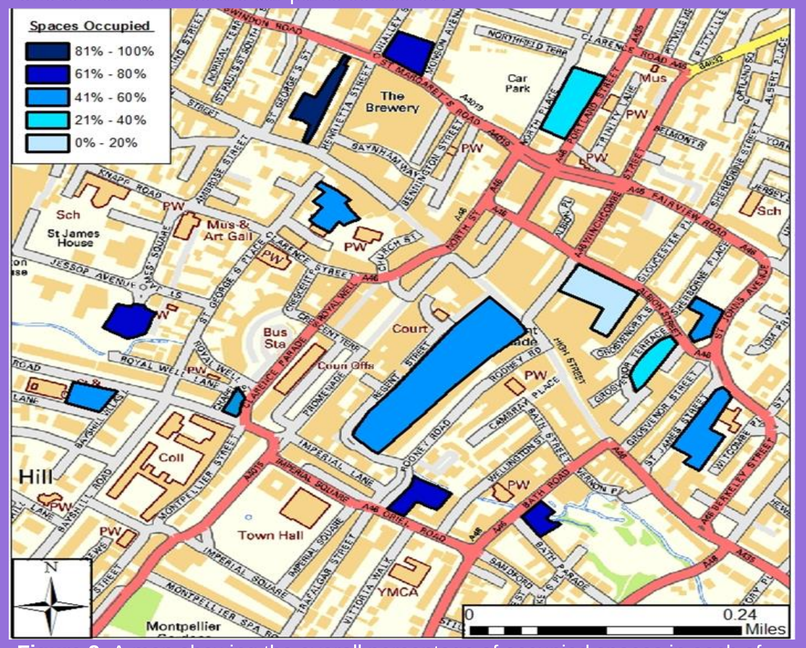

Figure 2. A map showing the overall percentage of occupied spaces in each of 14 town centre car parks, over a 7 day period.

Discussion

From these results we can see that even with the closure of the Beechwood Arcade car park in 2016, Cheltenham appears to have enough dormant capacity to accommodate displaced motorists.

Cheltenham's parking charges are in line with other, similarly-sized settlements such as Bristol, Swansea and Plymouth (Cheltenham Borough Council, 2015; City and Council of Swansea, 2015; NCP 2015; Plymouth City Council, 2015). Differentiated policies for residents and visitors, as is the policy in York, could be an option for Cheltenham, as could a zonal policy as seen in Manchester (City of York Council, 2015: Manchester City Council, 2015). Free parking during specific times, as is present in Bicester and Gloucester, may be beneficial in attracting visitors during periods where visitor numbers are low (Gloucester City Council, 2015). Zonal policies are effective where occupancy rates are not equally distributed within a town or city, however, to know if this would be beneficial for Cheltenham would require a further survey of peripheral car parks (Cheltenham Borough Council, 2015; Manchester City Council, 2015).

Integrating car parking facilities with public transport in Park and Ride facilities has the potential to shorten car trips, contributing to more sustainable mobility.

The question of best practice in payment type suggests that other methods, such as "pay on foot" may be more effective than "pay and display", though implementation remains a severe complication.

Conclusion

Our data suggests that Cheltenham has sufficient capacity in parking spaces, preventing any current need for the creation of more car parks; this indicates that Cheltenham is in keeping with global sustainability agendas, and is upholding UN millenium development goal number 7 (UN, 2015) . However, it could also be argued that by having a more than sufficient number of car parking spaces, Cheltenham is allowing and encouraging its inhabitants and visitors to drive around the town instead of walking.

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