

## **Parking Developments Report – Appendix A**

### **1. Parking Research**

There have been numerous pieces of parking research carried out over the years. The most relevant research to the issues raised in this report are described below.

#### **1.1 Management of Parking Occupancy / Demand**

It is generally accepted that a parking occupancy rate of between 60 and 80% is optimal. This means that although the area is busy, a driver seeking a space will not need to look far before finding one.

An International Parking Institute Study estimated that 30% of drivers in congested urban centres were in fact looking for parking::

*It is estimated that about 30 percent of the cars circling a city at any given time are doing so as drivers look for parking. Aside from the frustration factor, those cars are creating traffic congestion, viewed by survey respondents as being the single most significant societal change affecting the parking industry. From an environmental standpoint, that translates to incalculable amounts of wasted fuel and carbon emissions.”(International Parking Institute (IPI) 2012 Emerging Trends in Parking Study).*

Other studies have estimated the figure as being somewhat lower, but it is clear that drivers seeking parking spaces are a significant factor in traffic congestion in cities.

Managing the supply of parking (via the number of spaces available or placing time limits on stay lengths) and charging for parking are well-established methods of managing demand for parking. These methods are used by most local authorities who charge for parking.

The availability of parking appears to be an increasing concern for motorists. The RAC produce an annual report on Motoring and the latest 2016 report notes:

*There has been a sharp increase in concern about the availability of parking this year: 14% of motorists say this is a top-four concern as opposed to just 8% in 2015.*

#### **1.2 Effects of Price of Parking on Travel Behaviour**

The Department for Transport commissioned Transport Research Laboratory (TRL) to carry out a review of all available parking research, which concluded:

*“Much research has demonstrated the importance of parking costs to travel choices although the extent of the impact may vary. A combination of parking charges and reducing or restricting parking availability is likely to be most effective in encouraging behavioural change.” (Parking Measures and Research Review, TRL, 2010)*

### **1.3 Parking and Placemaking**

#### **Effects on Business**

A parking research review, commissioned by the London Councils and carried out by The Means, a placemaking consultancy, which studied all relevant research carried out on parking, concluded that a well-structured and managed parking system with appropriate charges could be beneficial to businesses:

*“The limited research into the impacts of parking on the local economy suggest that there are no adverse impacts of a well-managed parking scheme on the local economy (COST Action 342 2005). Research carried out in The Netherlands even suggests that a well-structured parking system, could even be beneficial to town centres. If set appropriately, parking charges results in a higher turnover of visitors and therefore potentially higher retail turnover.”*

The Means concluded that Parking was not the most influential factor for motorists in deciding whether to visit a shopping destination:

*Parking is often perceived as important to town centre business in attracting customers. The Means own survey data demonstrates this as does the RAC Foundation and British Retail Consortium Report from 2006. However, the evidence from studies focusing on shopper surveys suggests that other factors may be much more influential in the choice of shopping location. Some of the most frequently quoted are the mix of retail and environmental improvements or creating a pleasant atmosphere in which to shop.*

*Here there is also an irony: congestion is one of the factors that are often cited as making a urban centre location unattractive, yet retailers still perceive parking as being one of the main reasons for lack of footfall. Well managed parking that reduces the need for searching could be one way to improve the attractiveness of town centre. At the same time, reducing congestion makes it easier for those on foot to access town centres. (The Relevance of Parking in the Success of Urban Centres, The Means, 2012)*

This supports that keeping parking occupancy to a level of 60-80% is beneficial, as it reduces congestion by ensuring drivers do not need to circulate seeking a parking space, reducing levels of congestion.

#### **1.4 Effects of Travel Mode on Business**

The available evidence from studies carried out is that drivers are not the highest spending visitors. The review of parking research by The Means concluded:

*The evidence from all the available studies into how people travel to town centres is that the share of those that come by public transport, walking or cycling is greater than that of those that come by car. There are some variations in this. Town centres with poorer public transport links will see higher levels of car use. Smaller urban centres within cities are likely to see higher levels of walking and cycling.*

*However in all the studies that looked at shoppers' mode of travel, shopkeepers have consistently overestimated the proportion of their customers who come by car. In some cases this overestimation approaches 100 per cent compared to the actual figure. In the case of Camberwell, in 2008, shopkeepers overestimated the share of shoppers coming by car by a factor of over 400 per cent*

*The analysis from the Camberwell study, from the Transport for London Town Centre Survey and of the shopping centre data by the ROI Team shows that those who don't come by car are responsible for a larger average spend. Whereas car drivers may spend more in a single trip, those that come by bus spend more per week and per month. The biggest spenders in London are those that walk. (The Relevance of Parking in the Success of Urban Centres, The Means, 2012)*

One of the published studies on how people travel to town centres was carried out in Bristol by Sustrans. This study was replicated in Barnsley by Barnsley Council around five years ago and their findings mirrored the ones from Bristol, that business owners vastly overestimated the number of customers who travel to them by car. The Barnsley study was not published but was carried out by a Sheffield Hallam University postgraduate student.

## **2. Travel Cost and Vehicle Usage Trends**

### **2.1 Costs of Travel**

The Office for National Statistics concluded that in the period from 1980 to 2014, the general cost of motoring fell by 14%, whilst the cost of bus travel rose by 58% and rail travel costs increased by 63%. Reduced overall motoring costs, combined with an improving national economy, tends to result in car traffic levels increasing.

### **2.2 Vehicle Usage Trends**

Department for Transport figures show that motor vehicle usage in Sheffield increased from 2,169 million vehicle kilometres in 2013 to 2,224 million in 2015 (last available figures). At the same time, although some public transport fares in Sheffield have risen (mainly single trip and day tickets), the Council has worked in partnership with bus operators via the Sheffield Bus Agreement, which has resulted in significant decreases in multi-operator ticket costs, for example a weekly multi-operator ticket was £22.70 and is now £14.

The net result of motoring costs reducing over time is that car trips become relatively cheaper and drivers are therefore less likely to choose more sustainable modes of travel for at least some of their trips.

### 3. Parking Demand in The Peripheral Parking Zone

#### 3.1 Occupancy Survey Results

Results of survey of Western Sector of PPZ carried out in 2016 shown in the table below. Results show many streets with occupancies higher than 80%, with some reaching 100%.

#### **Full or Over-Occupied Streets in Western Sector of Peripheral Parking Zone (≥ 80%) (pay & display / shared bays only – June 2016)**

Street	Observed occupancy rate of P&D bays  Average of four samples Weekdays 10am – Noon 1 – 3 pm	
Gloucester Street	213%	OVER-OCCUPIED
Northumberland Road	139%	OVER-OCCUPIED
Hanover Square	130%	OVER-OCCUPIED
Mushroom Lane	106%	OVER-OCCUPIED
Wellesley Road	103%	OVER-OCCUPIED
Broomfield Road	100%	OVER-OCCUPIED
Severn Road	96%	OVER-OCCUPIED
Shearwood Road	95%	OVER-OCCUPIED
Beech Hill Road	89%	FULL
Damer Street	89%	FULL
Peel Street	85%	FULL
Broomhall Road	85%	FULL
Park Lane	85%	FULL
Wharnccliffe Road	80%	FULL

#### **Notes**

Totals in excess of 100% arise due to a) vehicles being parked outside of parking places and b) some vehicles being parked closer together than nominal 6m length of parking space.

≥ 80% is considered full, ≥ 90% is considered over-occupied, as at these occupancies, as lack of spare kerbside, and loss of kerbside due to inefficient parking behaviour (which might mean free kerbside is not distributed so as to be usable), means drivers are considered likely to have to circulate to find a space. Such circulating is inconvenient for drivers (due to time lost), and it not in the interest of the city (representing unnecessary additional vehicle mileage with attendant increases in danger of collision, vehicle emissions, nuisance to other road users etc.)