

## Assumptions

A number of models based on behavioural changes by the customer have been created.

- Evenings

Estimates of evening use between 6:30pm and 10:00pm are based on two sample sets of data of car parking acts observed in December 2011 and January 2012. It is assumed that one parking act for the entire charged period was observed.

After 6:30pm observations of parking behaviour are based on free to use car parks. There are alternatives for parking after 6:30pm which are without charge, mainly resident permit zones, single yellow lines, on-street restricted parking. The restrictions in place cease to operate for these after 6:30pm and so displacement may occur to these areas.

- Behaviour

The models are based on pay and display ticket sales in 2012. The proposed tariff band changes and charge changes are *designed* to change behaviour. It will therefore be difficult to determine the full impact until at least a year has progressed, although it will be monitored closely.

The use of 30 minute and 90 minute tariff bands is unknown as there is no current data for these newly proposed time periods. Dwell time of current parking is not known, other than assumed to be the same as the pay and display ticket bought for a specified period.

## Models

In order to generate possible outcomes officers have developed models based on 2012 use.

The models are split into:

- Best case (in terms of income), whereby all car park users (100%) that have the choice of a new tariff based on their previous choice 'trade-up' to a longer parking period.
- Worst case (in terms of income), whereby all car park users that have the choice of a new tariff based on their previous choice 'trade-down' to a shorter parking period.
- Middle case, where half chose to 'trade up' and half choose to 'trade down'.
- Officers have also sought to identify the point where pay and display income remains constant, a level of 25% 'trading down' and 75% 'trading up'.

## Financial Summary – Pay and Display

### Model A – Worst Impact (All car park users trade down)

7:30-16:00	:assume 100% of 1hr trade down to free 1/2 hour	
7:30-16:00	: assume 100% of 2hr trade down to 90 mins	
7:30-16:00	:assume 100% of 4hr trade down to 3hr	
16:00-18:30	:assume 100% of 1 hour trade down to free 1/2 hour	
16:00-18:30	:assume 100% of all day can still purchase all day ticket	
18:30-22:00	:assume all 30 min free	
New Tariff Calculation Impact		-£1,017,366.48
Impact of post 16:00 £1		-£95,496.27
Impact of Evening Charge		£0.00
		<u>-£1,112,862.75</u>

### Model B – Half Way Change in Behaviour (50% trade up, 50% trade down)

7:30-16:00	:assume 50% of 1hr trade down to free 1/2 hour	
7:30-16:00	: assume 50% of 2hr trade down to 90 mins	
7:30-16:00	:assume 50% of 4hr trade down to 3hr	
16:00-18:30	:assume 50% of 1hr trade down to free 1/2 hour	
16:00-18:30	: assume 100% of all day can still purchase all day ticket	
18:30-22:00	:assume 50% take 30 min free	
New Tariff Calculation Impact		-£359,650.42
Impact of post 16:00 £1		-£53,746.59
Impact of Evening Charge		£74,277.00
		<u>-£339,120.01</u>

### Model C – Best Case (100% trade up)

7:30-16:00	:assume 100% of 1hr trade up to 90 mins	
7:30-16:00	: assume 100% of 2hr trade up to 3hr	
7:30-16:00	:assume 100% of 4hr trade up 5hr	
16:00-18:30	:assume 100% of 1hr trade up to >30min	
16:00-18:30	: assume 100% of all day can still purchase all day ticket	
18:30-22:00	: assume 100% pay £1	
New Tariff Calculation Impact		£298,065.64
Impact of post 16:00 £1		-£5,799.15
Impact of Evening Charge		£148,554.00
		<u>£440,820.49</u>

### Model D – Break Even (25% trade down, 75% trade up)

7:30-16:00	:assume 75% of 1hr trade up to 90 mins	
7:30-16:00	: assume 75% of 2hr trade up to 3hr	
7:30-16:00	:assume 75% of 4hr trade up 5hr	
16:00-18:30	:assume 75% of 1hr trade up to >30min	
16:00-18:30	: assume 75% of all day can still purchase all day ticket	
18:30-22:00	: assume 75% pay £1	
New Tariff Calculation Impact		-£66,787.89
Impact of post 16:00 £1		-£31,734.99
Impact of Evening Charge		£111,415.50
		<u>£12,892.62</u>