# Revenue Income Optimisation (RIO)

# **Epping Forest District Council**

3rd November 2011

# **Contents**

1	Exe	cutive Summary	. 3
	1.1	Overview	. 3
	1.2	Initial analysis	. 3
		Developing opportunities	
	1.4	Developing the business cases	
2	Busi	iness Cases developed	5
	2.1	Advertising and Sponsorship	5
	2.2	Parking	. 6
	2.3	Solar PV	7
3	Und	lerstanding the Council's approach to income generation	. 9
	3.1	Sustaining an income focus.	
4	Imp	lementation	10
5		endices	
		dix: Advertising and Sponsorship Business Case	
		idix: Parking Charges Business Case	
		ıdix: Solar PV Business Case	

# 1 Executive Summary

#### 1.1 Overview

The Revenue Income Optimisation (RIO) project sought to identify opportunities for improved fees and charges arrangements and proposals for commercial income generation for the Council.

The project ran for 3 months and included three main stages:

- Project mobilisation and initial analysis
- Developing opportunities and focussed analysis
- Business cases and reporting

At each stage the project reported to the corporate Management Board.

The Project has identified three key income opportunities Advertising and Sponsorship, Off-Street Car Parking, and Solar Photovoltaic installations.

## 1.2 Initial analysis

Based on 2009/10 revenue out-turn data, we found that overall income against expenditure was 8%. Looking at the performance of Epping Forest District Council's 15 CIPFA Nearest Neighbour Comparator Councils, Broxbourne and East Herts achieved 11% and 16% respectively.

However, our initial work quickly uncovered a significant amount of change across many parts of the Council where initiatives to increase income had already taken place or were in progress. However, experience of similar projects elsewhere suggested that there would still be opportunities for further improvement.

As Epping Forest District Council has devolved a number of services to local Town and Parish Councils a number of common areas where a District Council may traditionally be able to generate income, such as cemeteries, allotments and sports pitches, were ruled out of inclusion in the project.

Initial basic benchmarking of fees and charges found that comparatively, Epping Forest District Council's fees and charges varied between being some of the lowest in the County to being just above average. However, there was substantial variation between services, suggesting that varied approaches had been taken to setting the level of fees and charges.

Whilst we also found evidence in many services of recent benchmarking of their prices and subsequent price increases, discussions with managers revealed that this was not always a regular activity and that there were many different approaches to the setting of fees and charges across the Council. This is not uncommon within local councils.

# 1.3 Developing opportunities

This stage of the project involved a series of focussed workshops covering all service areas. Each workshop examined current practice and identified opportunities to develop income. The following workshops were held:

- Advertising and Sponsorship
- Off-Street Car Parking

- Planning, Building Control and Land Charges
- Property and Assets
- Licensing and Environmental services
- Leisure, Community and Culture

A list of opportunities was developed and grouped before presentation to the Management Board as recommended business cases to be developed. It was agreed that five of the areas identified showed opportunity. Three of these were subsequently developed into business cases and basic evidence and benchmarking information was provided for the remaining two areas.

#### 1.4 Developing the business cases

Following the approval to develop the business cases, each one was developed with council officers responsible for delivering services. At this stage the Board met to review the draft business cases and make recommendations for further refinement

At the final meeting of the Management Board, all project findings and business cases were presented and approval sought, subject to any required final amendments which have been incorporated into this report.

Two of the business cases, Advertising and Sponsorship, and Off-Street Car Parking have been considered over a three year basis. The business case for Solar PV has been considered over a 25 year period as the case for change is based on a much longer time period as much more significant investment is requirement to secure a return.

The following tables set out the business cases and their values, which have been created in conjunction with each business case owner:

Business Case	Potential net income in year 1 (£)	Potential net income over 3 years (£)
Advertising	£19,520	£123,819
Off-Street Car Parking	£333,553 - £476,330	£1,020,659 — £1,448,989
Total	£353,073 - £456,810	£1,144,478 - £1,572,808

Solar PV Business Case				
Annual Net Income	£5,398 year 1 rising to £31,458 year 25			
Installation Costs	£123,170			
Total Net Income (25 years)	£257,094			
Payback Period	13 years, 7 months			
AER	3.11%			

# 2 Business Cases developed

This section provides short overviews of each of the business cases developed. More detailed business cases for each are contained within the Appendices.

# 2.1 Advertising and Sponsorship

This business case proposes that the Council develop a coordinated corporate advertising and sponsorship programme across the Council owned assets. These assets include:

- 1. Website
- 2. Billboards
- 3. Posters on buildings
- 4. Lamppost banners
- 5. Other Street Furniture
- 6. Vehicles
- 7. Event Sponsorship
- 8. Pre-existing advertising

There is an opportunity to centralise the advertising and sponsorship strategy and management at the Council in order to fully control the asset base and to leverage maximum income yields from media buyers. A centralised and commercial function will enable the Council to channel its advertising assets into the market more robustly and effectively through dedicated and expert media sellers. This should maximise income and more fully utilise assets that have not been considered to date or ones where limited advertising has taken place.

# This would involve the Council having:

- Centralised management and co-ordination of all advertising activity with one team at the Council which also owns the advertising strategy
- An assessment of local market conditions to understand which opportunities are likely to deliver significant returns in the short, medium or longer term
- Suggestions as to how opportunities might be 'bundled' to maximise their appeal to the market and therefore maximise returns
- Best practice approaches to securing sponsorship and potential targets
- Identification of any risks which may affect projected revenues and strategies for managing these.

It is recommended that this opportunity be implemented through a managed service provided by an external advertising provider. Using this approach, the Council may be able to reduce their risk through contractual arrangements, i.e. by only paying a % of the net income generated. Alternatively, this opportunity could be implemented by an in-house advertising team. For the purposes of this business case, it is estimated that the costs under each option would be similar.

Exact details of all figures used can be found in the detailed appendix but broadly, the income calculations have been based on 3 large roadside billboards, 8 smaller billboards, 40 columns and 530,000 website hits.

## Projected additional income

	Year 1	Year 2	Year 3	Total
Website	£4,288	£5,359	£5,359	£15,007
Billboards	£25,560	£31,950	£31,950	£89,460
Other advertising	£14,672	£23,340	£26,340	£64,352
Costs	-£25,000	-£10,000	-£10,000	-£45,000
Total Net	£19,520	£50,649	£53,649	£123,819

# 2.2 Off-Street Car Parking

The focus of this business case is Off Street parking which remains the responsibility of the Council, as On-Street parking will shortly be undertaken in partnership with other authorities in the North Essex Parking Partnership, led by Colchester Borough Council. Off-Street Charges have been frozen at their current level for over 3 years and this is an ideal time to review the entire parking charging structure alongside other related opportunities.

The opportunities considered in this business case include:

- 1) Restructure of standard charges
- 2) Charging for parking on Saturdays
- 3) Charging for parking on Sundays and Bank Holidays
- 4) Increasing parking hours such as evening charging
- 5) Maintaining charges throughout the Christmas period
- 6) Examine whether Blue-Badge holders should be exempt

A number of options for amending the car parking charging structure have been modelled as set out below. A basic description of the models and calculations for each can be found in the notes to calculation included in this business case include in the appendix. More detailed calculations are contained in an Excel spreadsheet that has been provided to the Council as part of the RIO exercise.

- A. Inflation based price increase
- **B.** Above inflation price increase
- C. Changed Structure
- **D.** Rest of Essex Set to maximum
- **E.** Rest of Essex Set to the average

#### Projected additional income

Net Income	Year 1	Year 2	Year 3	Totals
Option A	£215,416	£225,416	£225,416	£666,248
Option B	£153,673	£163,673	£163,673	£481,020
Option C	£234,502	£264,502	£264,502	£763,505
Option D	£256,353	£266,353	£266,353	£789,058
Option E	£113,576	£123,576	£123,576	£360,728
Saturdays	£78,925	£78,925	£78,925	£236,775
Sundays and Bank Holidays	£80,925	£80,925	£80,925	£242,775
Evenings	£24,167	£24,167	£24,167	£72,501
Christmas	£14,000	£14,000	£14,000	£42,000
Blue Badges	£21,960	£21,960	£21,960	£65,880

#### Total Net additional income (all opportunities combined)

Total Net Income	Year 1	Year 2	Year 3	Totals
Option A	£435,393	£445,393	£445,393	£1,326,179
Option B	£373,650	£383,650	£383,650	£1,140,951
Option C	£454,479	£484,479	£484,479	£1,423,436
Option D	£476,330	£486,330	£486,330	£1,448,989
Option E	£333,553	£343,553	£343,553	£1,020,659

# 2.3 Solar PV energy generation (Civic Offices)

NOTE: Following the reduction of the Feed in tariff by approximately 50% from the 12<sup>th</sup> December, this business case has been amended to take into account this reduction. If the Council does proceed with this business case, timing will be critical in order to maximise the feed-in-tariff achieved, avoiding any further reductions. The feed in tariff used is 15.2p per KwH, and does not take into account the effect of any aggregated Solar PV if any other installations go ahead, taking the overall Solar PV generation level over 50KwH across multiple Council sites.

Recently introduced feed in tariffs (FITs) have managed to kick-start the roll out of solar in the UK. The "Feed-In Tariff" is fixed for 25 years (index linked) and is a payment made for all energy generated regardless of whether this is used. This has been introduced by the Government to help offset the high one-off capital cost of installing Solar PV to generate electricity. Any electricity that is generated is then free to use, and any unused electricity can be exported, making up the three strands of the financial benefit to installing Solar PV. FITs have been highly successful in continental Europe at driving rapid increases in solar PV market; in many European countries annual installations increased in excess of 300% in the first year of feed in tariffs.

At the Civic Offices, a large amount of work has already been undertaken to increase the energy efficiency of the various buildings via double glazing, additional insulation, room lighting sensors and intelligent energy monitoring and management software. These improvements, along with others have allowed the Council to reduce energy consumption and in 09/10 and 10/11. This has saved the Council approximately £77,000 and improved the energy consumption rating from a 'G' to a 'D' rating.

This business case proposes the use of approximately  $300m^2$  of south facing roof space, primarily on the Civic Offices, to install 150 Solar Panels offering the council the ability to generate around 35,000kwh yearly. This would, in turn, raise approximately £5,314 in income from the feed-in tariff, save £4,375 in electricity and make £108 from exporting energy back to the grid every year. It has also been calculated that this could save the Council around 20 tonnes of Co2 per year.

# Projected additional income

Solar PV Business Case				
Annual Net Income £5,398 year 1 rising to £31,458 year 25				
Installation Costs	£123,170			
Total Net Income (25 years)	£257,094			
Payback Period	13 years, 7 months			
AER	3.11%			

# 3 Understanding the Council's approach to income generation

From working with the Council it is clear that there is a lot of activity across the Council looking at revenue generation, particularly through the supply of services, the securing of external funding, and in relation to cost recovery initiatives. However, whilst there are corporate policies and processes in place, they do not always appear to be totally effective in setting the best prices and maximising income. Although the generation of income has not always had a high profile in the Council, recent projects across the Council have already helped improve this, in response to current financial pressures.

As a result of this project there is now an opportunity for the Council to more effectively promote income generation as an opportunity for addressing the current financial challenges of the Council. Giving a greater profile to income generation and communicating a consistent message in support of income generating opportunities should provide officers with the empowerment they are seeking to develop and implement new income generating ideas.

The Council will be concerned to ensure that its residents and communities do not see this as a way to simply generate more cash so it will be important that any changes in the Council's approach to income generation is put within the context of the wider work the Council is undertaking to reduce expenditure and increase efficiency.

It is also important that any changes to the Council's approach to income generation are underpinned by a clear and conscious decision as to what services should be based on a 'user pays' basis and which should be 'public goods' funded by the general fund. It will also be critical to ensure that those that most need the Council's support are not disadvantaged by the Council's approach to income generation, and that there should therefore be a clear and consistent approach to providing concession for specific users and communities.

# 3.1 Sustaining an income focus

To maintain the focus on income and commercial change, continued momentum is needed to develop the business cases set out in this report and those opportunities being pursued by other projects. The Council should consider undertaking the following activities in order to create a self-sustaining approach to the development of income opportunities and to further its commercial capacity.

- The development of an improved corporate income policy which incorporates an annual cycle of review
- The development of a Council wide concessions and eligibility strategy, as part of the income policy that sets out a clear and consistent approach to concessions for charges for particular groups of residents
- Recognition for income generation to further stimulate a commercial culture among staff
- A commercial skills mapping exercise to identify and pool existing capability
- A review of the budget process to ensure every income stream is a clear part of the budget development process and that income generation opportunities are identified as early as possible in the cycle.

We have found that there are a number of initiatives underway at Epping Forest, and have seen many examples of good practice in setting and monitoring fees and charges. We have seen evidence of recent benchmarking exercises in a number of areas which the service had used to determine charging policy and charging levels. However, a concerted and co-ordinated approach is required to bring all of these areas together.

# 4 Implementation

Each business case includes a high level implementation plan and critical next steps. For each business case, the Council will need to assign roles and responsibilities and agree a timeline for implementation. There are five key steps which will support the Council in delivering the sums identified:

- 1 Identify funding to progress the high level business cases that require initial investment.
- 2 Identify capacity to support each service to realise income targets and to monitor delivery.
- 3 Develop a governance structure for fees and charges, such as a fees and charges board, that has overall responsibility for monitoring income generated. This should be linked to the Council's existing annual budget building and monitoring processes. This will ensure that this project has not been a 'one off activity' but instead has stimulated new ways of thinking and working to enable income optimisation and the development of commercial capacity.
- 4 To achieve implementation across all of the business case areas a resourcing plan is required based on commercial business case development capability, ensuring scarce skills, such as marketing, are allocated across projects and not sourced separately by service managers.;
- 5 To remove some of the potential barriers to implementation and to track benefits realisation the outcomes of the RIO project require project management capacity to manage the implementation phase and benefits realisation monitoring.

As part of the project a larger number of initiatives were identified and discussed, some of which were being pursued, or to be pursued as part of the Council's other projects and reviews. Others were seen to be 'quick wins' which did not need the development of a business case in order to pursue. Progress on these activities should also be kept under review in order to ensure that they are progressing as expected.

# 5 Appendices

• Appendix 1: Advertising

• Appendix 2: Car Parking

• Appendix 3:Solar PV

#### **Appendix: Advertising and Sponsorship Business Case**

Opportunity Title	Advertising and Sponsorship
Subject / service area	Cross-Directorate

#### Opportunity type and description

Cost recovery	Cost recovery Restructured charges		Traded service
		$\boxtimes$	

# Opportunity description

This business case proposes the development of a coordinated advertising and sponsorship approach across Council owned assets utilising 3<sup>rd</sup> party advertising providers where possible. It focuses on a variety of current and new forms of advertising to include the following areas:

- 1. Website
- 2. Billboards
- 3. Posters on buildings
- 4. Lamppost banners
- 5. Other Street Furniture
- 6. Vehicles
- 7. Event Sponsorship
- 8. Pre-existing advertising

Centralising its approach to advertising will enable the Council to fully exploit its existing asset base thus leveraging maximum income yields from media buyers. A centralised function will enable the Council to more effectively channel its advertising assets onto the market. It is suggested that the Council seek to use 3<sup>rd</sup> party specialist media sellers to support this activity as this will both bring in expertise not currently possessed by the Council and reduce the amount of officer time required to support such activities. This outsourced approach would require a small amount of dedicated inhouse resource to oversee the contracts and actively seek sponsorship opportunities, most likely a part-time post equivalent to approximately 1-2 days a week. The proposal will involve the Council:

- Developing an Advertising and Sponsorship policy to communicate guidelines to all staff whilst raising the profile of advertising and sponsorship opportunities as a source of income
- Centralising management and co-ordination of all advertising activity within one team at the Council with responsibility for the Advertising and Sponsorship policy
- Identifying any risks which may affect projected revenues and strategies for managing these.

In developing this business case consideration has been given to a wide range of advertising opportunities, such as adverts on payslips. However, some have not been pursued as they are unlikely to be attractive to advertisers due to the relatively small size of the Council. . It is estimated that this business case would generate a total of approximately  $\pounds 53,650$  per annum in income for the Council by year 3.

	Year 1	Year 2	Year 3	Total
Website	£4,288	£5,359	£5,359	£15,007
Billboards	£25,560	£31,950	£31,950	£89,460
Other advertising	£14,672	£23,340	£26,340	£64,352
Costs	-£25,000	-£10,000	-£10,000	-£45,000
Total Net	£19,520	£50,649	£53,649	£123,819

Benchmarking information has been obtained from other Councils for each opportunity and a number of third party providers have previously been consulted to validate the assumptions set out in this document. Further assumptions as to the suitability of assets across the organisation should be reviewed and considered further to understand the full extent of this opportunity prior to entering into any procurement activities.

All of the figures in the business case assume a managed arrangement, with a fee retained by the service provider. All income is presented as net of costs, with the exception of initial installation costs for the billboards and funding for the advertising team member.

#### 1. Website

This opportunity is to place commercial adverts on <a href="www.eppingforestdc.gov.uk">www.eppingforestdc.gov.uk</a>. There is currently no advertising on the website and usage statistics demonstrate fairly high proportional usage per capita.

Benchmarking suggests that the average income that can be achieved from advertising on a main local authority website is £3,000 to £50,000 per annum, depending on the number of hits on the Council website. Income is achieved either through selling web space directly or through an outsourced arrangement. One of the simplest ways to set up web based adverting is to use an established advertisement services provider. It has been estimated that the potential annual income the Council could generate is £5.4k per annum for carrying web advertising. The website calculations are based on estimates of £10 per 1000 hits for <a href="https://www.eppingforestdc.gov.uk">www.eppingforestdc.gov.uk</a>.

The implications of any wider strategy around 'Channel Switching' will also need to be considered as part of this decision. However there is no evidence to suggest that web advertising on Council websites elsewhere has discouraged residents from using the website. Few technical issues are anticipated as the new Joomla Content Management System should provide a good platform but potential security issues will need exploring with ICT if this is taken forward.

#### 2. Billboards / advertising on Council properties

There is an opportunity to advertise on various land and building assets across Epping Forest. The initial assets considered included offices, open spaces and car parks. However, the only areas that are considered to have sufficient footfall and minimal contractual implications are the busier car parks. It has been assumed that five billboards are likely to receive permission and be constructed. Due to commercial arrangements, advertising on any commercial properties would not be possible and discussions suggest that the majority of Epping Forest's office properties would not receive sufficient footfall.

More information on the suitability of each site will be required to determine the full extent of the opportunity. However, based on a number of assumptions as to weekly income per billboard, it is estimated that income of approximately £14k per annum could be generated through just eight 6-sheet posters (this may involve no boards at some of the sites and more than one advertising board at others).

#### 3. Major Billboards at prime locations

Four sites large enough to support 48 or 96 sheet billboards have been identified; these are facing the M25 near Waltham Abbey, facing the M11 near Chigwell, facing the M11 at North Weald and on the Hangars at North Weald airfield. It is assumed that three out of the four would be given permission to go ahead.

The estimated income could be approximately £17.5k per annum through three 48-sheet

billboards. This is using conservative income estimates based on lower viewing figures and actual income received may substantially exceed this given their proximity to major motorways (current figures assume £150 income per week after  $3^{rd}$  party share and a 75% occupancy rate). There would be an initial construction cost of £3000 per basic billboard, maintenance costs and the costs for changing the advert would be borne by the  $3^{rd}$  party, design and printing costs would likely be borne by the advertiser. More advanced billboards may cost more to erect but would likely bring in more income to offset this.

#### 4. Lamppost banners

Lampposts and CCTV columns in the District that are the responsibility of the Council, such as those in Car Parks, could be utilised for commercial adverts. Lamppost banners are already firmly established as a highly visible and cost-effective way to promote community-based campaigns and civic pride, and to support local events and businesses. It is a cost effective alternative to the cost of billboard and street poster advertising. When not in use by advertisers they could be used by the Council for its own promotional purposes.

Material lamp post banners are able to be fitted to most lampposts and are designed to be able to withstand wind without putting excessive pressure on the lamp post column. Banners could be material PVC coated banners with spring clips, which will reduce wind loading. Street banner advertising is not new, and others authorities including Manchester, Southampton, Norwich, Haringey and Hackney already advertise in this way. It will important to be mindful that certain columns will not support large weights and surface areas of additional products as this can cause wind shear and could disturb the balance and stability of the camera images. Each column will have a guideline to what weights and measures are acceptable.

There are 92 lampposts and 37 CCTV columns operated by the Council. Assuming 40 suitable lamp-posts and CCTV Columns (31% of the total) and an occupancy rate of 75% and average revenue of £378 per lamppost per annum with a fully managed service through a 3<sup>rd</sup> party, potential revenue of £11.3k per annum could be raised from this source. It will be important to establish whether a 3<sup>rd</sup> party advertising agency would be interested in a small number of lampposts.

#### 5. Other Street Furniture

This proposal would involve offering advertising space on all other street furniture operated by the Council, including bins, benches, phone boxes and bus shelters. The majority of benches in parks are memorial benches which have been bought by members of the public. These benches are made of solid oak and built to last, therefore current income potential is limited. In the future, it may be possible to sell a lease for a memorial bench in order to fund maintenance costs and generate recurring income.

Given the small number of street furniture items owned and maintained by the Council, it is suggested that organising advertising on these may not be feasible and although this section has been retained for completeness, no income has been calculated from street furniture other than lamp posts.

#### 6. Vehicles

The proposal is to offer commercial advertising opportunities on Council operated vehicles. 20 Council vehicles have been estimated as suitable for advertising and it is estimated that 50% of these would carry advertising. Research with third party agencies shows that the Council could hope to achieve £500 per annum per vehicle with a fully managed service approach. Assuming that half of all suitable vehicles run advertising, this would generate an additional £5k of income per annum for the Council.

Previous sponsorship arrangements have been attempted and are no longer in place, suggesting this opportunity may not be suitable for the District. The small number of vehicles here may be too small, nevertheless — the opportunity may be worthy of further investigation, particularly looking at the larger commercial vehicles such as refuse lorries.

#### 7. Events and Sponsorship

The proposal is to seek out sponsorship of events or services hosted by the Council (or in the area, under shared income arrangements). Sponsorship of major events or services will allow the Council the opportunity to recoup the cost of staging these events or running this services.

As a consequence of the amount of time likely to be necessary to establish relationships with potential sponsors it has been assumed that sponsorship income will increase gradually. This would generate an additional £10k of annual income per annum for the Council by Year 3.

It will be important to remain impartial when dealing with any potential sponsorship deals and ensure that there are no conflicts of interest and they adhere to the Council's advertising and sponsorship policy. Despite this, with the right sponsor, this could be a lucrative market for the Council.

#### 8. Pre-existing advertising

The Council's main publication, which is published 3-4 times a year already includes advertising which is organised and maintained by a 3<sup>rd</sup> party, helping to a partly subsidise the cost of the publication. The Forester features 8 pages of advertising. There are a number of smaller publications and other printed material issued by the Council but potential income from these has not been costed in this business case. Examples of this include recent recycling leaflets which helped to cover their costs. The contract for the Forester currently being re-tendered and the Council will hope to maximise the benefit this contract has offered so far.

Other existing advertising and schemes should continue but only where it is economically viable to do so and where it fits with the new advertising and sponsorship model. Schemes such as the 'sponsor a tree' scheme should be reviewed as the long-term maintenance costs often significantly outweigh the initial sponsorship costs. In this instance, the Council has already recognised this and has launched a 'virtual tree' sponsorship scheme.

# Current financial position

Service	2009/10 income (£)	2009/10 expenditure (£)	Net position (£)	Cost recovery (%)
Advertising and Sponsorship	N/A	N/A	N/A	N/A

# Projected additional income

Projecteu additional income							
	Pre- Implementation	Year 1	Year 2	Year 3	Total		
Projected income (£)							
Website							
www.eppingforestdc.gov.uk	£0	£4,287.58	£5,359.48	£5,359.48	£15,007		
Billboards							
Buildings and Car Park billboards	£0	£11,520	£14,400	£14,400	£40,320		
Major Bill boards	£0	£14,040	£17,550	£17,550	£49,140		
Billboards Subtotal	£0	£25,560	£31,950	£31,950	£89,460		
Other							
Lamp-posts across authority	£0	£9,072	£11,340	£11,340	£31,752		
Other Street Furniture	£0	£0	£0	£0	£0		
Vehicle Advertising	£0	£4,000	£5,000	£5,000	£14,000		
Sponsorship	£0	£1,600	£7,000	£10,000	£18,600		
Other Subtotal	£0	£14,672	£23,340	£26,340	£64,352		
Grand Total		£44,520	£60,649	£63,649	£168,819		
Investment costs (£)							
Website	D 14: 4 :	1 , 1			• .		
Other	Built in to in		enas on mana its e.g. develo	igement risk sl pment	naring		
Publications							
Staffing	0	-£10,000	-£10,000	-£10,000	-£30,000		
Billboards	0	-£15,000	£0	£0	-£16,500		
Total Costs	0	-£25,000	-£10,000	-£10,000	-£46,500		
Total	0	£19,520	£50,649	£53,649	£123,819		

# Notes to Calculation

 $Please\ refer\ to\ Excel\ spreadsheet\ for\ information\ about\ details\ of\ projected\ additional\ income\ and\ expenditure.$ 

In the calculations, sensitivity analysis has been applied where appropriate to illustrate the impact of changes in demand.

#### **Assumptions**

#### **General Assumptions**

- It is assumed that once set-up, an advertising team consisting of 1 person working 1-2 days a week would be sufficient to manage the ongoing administration, due to most advertising assets being managed by third party providers. Income projections are based on the assumption that the service is mostly managed by third party providers.
- Market conditions remain stable.
- Assumption that advertising spaces available will be utilised at the rates included in the income calculations assumptions (usually 75%)
- Assumes that 3rd party providers will manage the services and Council assets to an acceptable standard.

Specific assumptions made for the purposes of calculation of each element have been referred to in the opportunity description.

#### Key evidence including relevant benchmarks

Included in this section is evidence which demonstrates the different approaches taken by various other authorities and where known, the amount of income generated. Due to the unique nature of each Authority, alternative methods may be appropriate for each one. Some of these figures therefore are for managed services, including all costs and others do not include costs of the Council's own advertising team or equivalent.

#### Website

#### **Internet Online Brokers**

Online advertising brokers act as the "middlemen" of Web advertising. These companies provide the website owner with content-relevant, revenue generating advertising for their websites, and advertisers and their agencies with advertising opportunities on popular and relevant websites. The Council would still be able to vet advertisers to ensure that they are deemed to be appropriate for the Council website.

There are different ways in which these companies structure the revenue income received:

Logonet: Is an advertising organisation specialising in the public sector. They have worked with over 30 other Local Authorities including Hastings Council, LB of Merton, LB of Bromley, Staffordshire Council, Tandridge district Council and Ashford Council to identify and then work with those businesses who could benefit from a presence on the website and, ideally, also offer services which would be of interest and value to local citizens.

Fast Click: Fast click places banner ads in a variety of different sizes. Fastclick works on a cost per 1000 impressions basis, meaning the Council gets paid every time the ads are shown 1000 times on your website. The Council would get paid whether or not anybody actually clicks on them. The Council gets 65% of the revenue and Fastclick keeps 35%.

Google Adsense: Offers a PPC (pay-per-click) service. The Council will have Google text ads on their website and get paid any time someone clicks on one of the ads. The Council receives anywhere between 50p - £1 per click.

**Commission junction:** offers a pay per sale service. The council would only earn if a visitor had clicked on the banner advert, gone through to the affiliated website, and then either signed up or bought something from that website

Councils currently generating income from web advertising include LB Hammersmith and Fulham, Nottingham, Ashford, Windsor and Maidenhead and Cheshire West & Chester.



**Basildon Council** is looking to "increase the effectiveness of the Councils website and to maximise revenue from advertising. Advertising on the Council's website will therefore be permitted." The Council will approach this on the assumption that advertising is permitted unless it falls into a prohibited category, as defined below.

#### Prohibited products, services and advertisers

The Council will maximise the number of advertisements and advertisers which are permitted to advertise on the Basildon website and minimise where possible, the number that are prevented from doing so by any policy controls or restrictions. The general principle will be that functionality and the websites primary role is enhanced and not comprised. Most products and services may be promoted, however all content should be consistent with and complementary to corporate policies.

Some specific categories of products and services will not be allowed, these are defined below.

Political organisations may not advertise on the web site.

Gambling organisations are not considered appropriate.

Organisations simply offering entry into a competition following completion of a form containing any personal information will not be permitted.

Advertisements where benefit is precluded from UK citizens will not be permitted.

Content or advertising which has an overtly sexual 'tone' will also be excluded.

**Epping Forest District Council** may want to also consider rules around advertising for businesses operated by Councillors as these have previously been refused under the current policy.

Chester West and Chester have introduced advertising on their website specifically following their Revenue Income Optimisation project and have set guidelines for advertising which are available below. Chester West and Chester do not carry it on their front page at all times.

http://www.cheshirewestandchester.gov.uk/system\_pages/advertising.aspx

LB Hammersmith and Fulham have recently redeveloped their website and ensured that the design supported advertising where possible, this advertising appears to be managed internally and targeted at local businesses.

Ashford DC—State that the income generated from advertising will support the costs of the upkeep and development of the website and other council services. They have an advertising policy on their site which can be viewed here: <a href="http://www.ashford.gov.uk/system\_pages/advertising.aspx">http://www.ashford.gov.uk/system\_pages/advertising.aspx</a>

**Approval** A poll undertaken by the Guardian on their website in April 2011 suggested that 61.1% of readers were in favour and 38.9% were against advertising on Council websites in general.

#### Major Billboards / advertising on Council Properties

Tower Hamlets generate £271k per annum from billboard advertising.

Leeds City Council offer 3 months per panel at £300 (plus VAT) which includes production of advertising graphics from client artwork and installation. Additional months are charged at £50 per panel. The Council also have A1 advertising panels in multi-storey car park, for which the monthly contract costs from £50 exc VAT. Posters can be supplied or produced at £25 each.

Leeds City Council advertises on panels at six recycling sites, reaching up to 300,000 local people per year at each site. The cost for 3 months per panel is £300 (plus VAT) which includes production of advertising graphics from client artwork and installation. Additional months are £50 per panel.

Norwich City Council poster panels are available to hire in multi-storey car parks. Prices range from £40 to £150 per month excluding VAT. Poster panels are all AO size  $(46\frac{1}{2} \times 33)$  inches).

Bath and North East Somerset achieve £6k per annum for one billboard

Luton uses around twenty 48 and 96 sheets but these are only viable for key locations with high traffic/ footfall especially in recent conditions. Planning permission is only required once — just for the initial build of the site, not each time a poster is changed. Clear Channel lease the billboards and manage the advertising.

#### Rate cards for Road side poster advertising:

Re-evaluation of the value of existing and advertising sites is good practice as the media market changes rapidly. Current rate cards for outdoor sites for 4 weeks are as follows:

Size Price

16 sheet posters (10x 7ft) Around £400-£495 48 sheet posters (20x10ft) Around £567-£700

#### Lamppost banners

Bay Media specialise in advertising on lampposts, and a previous tender submission quoted £378 per lamppost per annum as income for the Council concerned with all costs taken into account

Southampton CC lamppost banner costs start at £1,000 per lamp column for 12 months for advertising plus the costs (excluding charge for design and banner production).

Nottingham City Council can earn up to £5,018 per annum per lamppost and £193 per fortnight for advertising on lampposts.

Leeds charge £3,000 for each lamppost per annum and the cost includes production and installation.

Luton offers advertising on 70 lamp posts and use Bay Media to manage the service. When they first introduced them they erected 10 banners in one area and after a short time they carried out a consultation to get local reactions (which were positive/ neutral) before expanding the scheme. The most popular sites are town centre, ring road locations and around retail parks. They are currently looking to expand the coverage and carry out informal consultations with local businesses before applying for planning permission to test demand. The income arrangement with Bay Media is to receive a percentage of sales rather than a set fee. The charge is £1500 per annum.



#### Vehicles

Brent Council achieves around £500pa per vehicle to carry advertising. This is administered by a third party.

Manchester CC identified that from their fleet of 400 vehicles potentially 50% of could carry adverts. They assumed a rate of £500 per annum for each vehicle, with the advertising managed by third party on 50/50 profit share.

'Posters in Transit' is run by Marketing Force who are a vehicle fleet, advertising management company specialising in transit van advertising. Posters in Transit, pay £960 a year for each van that carries one of their posters on the back. There requirement is that vans are either white or silver. Marketing Force are currently working in over 70 local authority areas including Kent County Council, Buckinghamshire County Council, Bedfordshire County Council, Cambridgeshire County Council and Surrey County Council on various highway sponsorship schemes.

Alternative approach, more common in the Police; One avenue would be to approach vehicle dealerships to provide sponsored vehicles. Dealerships will usually provide a new vehicle if the Council negotiates a 2/3 year contract with them. Contracts should include maintenance and servicing by the dealership at no cost to the Council. Sponsored vehicles are usually fitted with decals with both the Council and sponsors logo. Ideally this should be paid for by the sponsor although the work may be done by Epping Forest District Council. Insurance would be paid for by Epping Forest District Council. In some cases dealerships will want to change cars annually to prevent wear and tear and maximise resale values - in this case you need to account for the costs of new decals for each car. Ideally sponsored vehicles should not add to the existing fleet - they should be sought to replace existing vehicles or where a significant business need has been identified for an additional vehicle. The sponsorship is largely 'in kind' but the value would ordinarily be costed on the basis of lease car costs over the sponsorship period (plus the cost of servicing/maintenance and decals)/ as a cost saving to the organisation. (Although the Fleet dept may have an alternative approach to costing). As a rough average depending on type of car, based on the lease car value, you may be looking at a sponsorship value of £1500-£4500 per annum per vehicle... so 8 vehicles on 3 year contracts could generate a sponsorship value of between £36,000 and £108,000 over 3 years (though this would not be cash income — but would be a reduction in expenditure).

#### Event Management and Sponsorship

Wrexham Council are considering using a sponsorship agent to bring in sponsorship. Under such an arrangement the Council would pay a fee of 5-10% of the sponsorship income. They are considering the option because attracting sponsorship in recent economic times has become difficult and they felt that using an agent to seek out likely deals was a good way to sustain the income. The existing events team brings in upwards of £100k per annum in sponsorship and financial support. In addition to this the Council are working together with other organisations to attract resources into cultural activities to create '2011 Wrexham Year of Culture' (WYOC). With the co-operation of

this wider network it is anticipated that a unified programme of up to 300 events could be created, that in turn could be showcased in a single promotional programme.

This would potentially generate significant media interest and therefore be more likely to attract commercial sponsorship. Wrexham Year of Culture was originally conceived when the Council identified that there may be as many as 200 existing 'cultural' events currently taking place annually in Wrexham County Borough, - but most if not all promote themselves individually and as a result seldom break through in terms of publicity. They took the view that if they could bring these events together in publicity terms the impact for all would be greater and the benefits for Wrexham could be considerable.

A website to identify potential sponsors is: www.uksponsorship.com/sponcom.htm

Nottingham City Council Offer a broad range of advertising platforms for local business and one of these areas is through Sponsorship of Council organised Events. The Council runs a variety of high profile arts, sports and cultural events and at the same time offers attractive opportunities for sponsors providing a good opportunity for businesses to be associated with the Council's ambition and to raise their own business.

Companies such as Elton Sponsorship provide such a service and have worked extensively with the public sector. <a href="http://www.eltonsponsorship.co.uk/">http://www.eltonsponsorship.co.uk/</a>

## **Advertising Policies**

Policies have been obtained from Cambridge City Council, Wiltshire Council, Cheshire Police, New Forest National Park and policies are also to be obtained from other local authorities. Again these can easily be adapted for the Council's purposes and a draft is proposed as an action of this business case.

#### Summary of analysis and consultation

Volume data and prices confirmed by Tom Carne.

PwC produced the business case, utilising information provided by the Council.

#### Issues and Risks

Issue/ Risk	Impact (H / M / L)	Proposed management actions
The Council does not currently have the expertise in house to develop and harness all of these advertising opportunities	High	The Council should consider either consider employing a specialist officer or outsourcing advertising and undertake a risk/reward or profit share arrangement.
Potential resistance from Members and customers, due to concerns about conflicting interests and the councils impartiality	High- Medium	Communicate drivers for change and strategic benefits of appropriate and targeted advertising. i.e. value for money as off sets some of the costs associated with providing services to the community.
Estimated income from advertising may be too high.	Medium	All costing has been produced from discussing the opportunities with advertising services providers currently working in the market and by reviewing other councils advertising portfolios.
Lack of control over content of advertising.	Low	Ensure corporate line is clear with third party advertising providers, and make sure clauses are in contract retaining a level of control within the Council
Potential damage to reputation	Medium	Clear policy to be produced and approved, and used when entering into third party contracts to cover issues such as content control, scope and

		breadth of advertising undertaken
Planning permission for some sites may be difficult to obtain	High	Ensure that the sites are carefully chosen to minimise this risk. Assumption that 3 of the 4 sites will receive planning permission has been taken.
Road safety/driver distraction	Medium	Ensure that any advertising is appropriate.
Damage to assets including lampposts	Medium	Sprung loaded windage solution proposed by lamppost provider to mitigate risk. Clause to be included in contract with provider to mitigate risk by passing risk and cost of damage onto provider.
Some opportunities may already be in place but are not identified separately within the service area leading to a reduction in the anticipated income	Medium	Ensure a cross-council review is undertaken to understand exactly what advertising activity is currently undertaken by each service area
If service areas do not engage fully with the project then the Council may be at cross purposes and may be targeting the same companies for different reasons. This could reduce potential income	High	Central and coordinated approach to advertising
Sponsors are chosen which are not impartial and affect	Medium	Ensure that all sponsorship applications are carefully reviewed by the Council

# Implementation plan: Key project activity and milestones

Key activity	Period			
	1 to 3 months	4 to 6 months	7 months onwards	
Create a Council advertising team to coordinate the approach				
Create a Council register of all advertising assets so a full assessment of all opportunities can be adequately considered				
Engage stakeholders to consult on advertising proposals				
Market testing to quantify demand and likely market rates				
Begin exploring the Market and approaching potential advertisers				
Engage with 3rd party suppliers and sign contracts with them				
Request planning consent for advertising				

# Critical next steps

- Adopt a centrally coordinated approach to income generation
- Establish team responsible for generation of income from advertising opportunities
- Set targets for additional income
- Begin implementation of easy to implement options
- Work on additional details and stakeholder engagement for more difficult to implement options
- Seek planning permission where applicable

# Business Case Appendix A

# Lamp columns in Car Parks

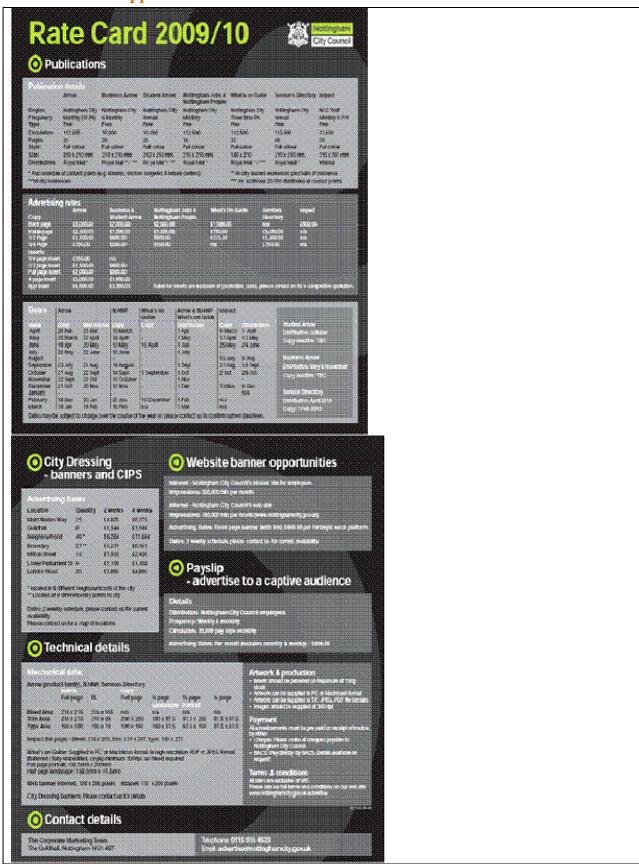
LOUGHTON	TRAPS HILL	THE DRIVE	HIGH BEECH	SMARTS LANE
	5 metal	1 Concrete	1 metal	None
LOUGHTON	BURTON ROAD	VERE ROAD		
	Housing?	Housing		
	10 Metal	12 Metal		
<u>EPPING</u>	BAKERS LANE	COTTIS LANE		
	11 Metal	18 Metal		
W.ABBEY	CORNMILL	QUAKER LANE	DARBY DRIVE	
	12 Metal	4 Metal	1 Metal	
<u>ONGAR</u>	PLEASANCE	BANSONS LANE	SAINSBURYS	
	5 Metal	3 Metal		
BUCKHURST HILL	LWR QUEENS RD	QUEENS RD		
	10 metal	None		
	METAL	CONCRETE		
TOTALS	92	1		

# **CCTV Columns**

Approx 37 columns are uses for CCTV. These are located throughout the district some of which are in remote and obscure areas. All columns are galvanised Steel

There are also 38 separate sites where CCTV is also used on buildings, mostly fastened to brickwork.

#### Business case Appendix B



#### **Appendix: Off-Street Parking Charges Business Case**

Opportunity Title	Parking Charges
Subject / service area	Parking – Off-Street

## Opportunity type and description

Cost recovery	Restructured charges	New income stream	Traded service
	$\boxtimes$	$\boxtimes$	

# Opportunity description

The focus of this business case is Off Street parking which remains the responsibility of the Council, as On-Street parking will shortly be undertaken in partnership with other authorities in the North Essex Parking Partnership, led by Colchester Borough Council. Off-Street Charges have been frozen at their current level for over 3 years. It is therefore an ideal time to review the entire off street parking charging structure alongside investigating other related opportunities rather than only undertaking an incremental increase in charges.

The opportunities being considered include:

- 1) Restructure of standard charges
- 2) Charging for parking on Saturdays
- 3) Charging for parking on Sundays and Bank Holidays
- 4) Increasing parking hours such as evening charging
- 5) Maintaining charges throughout the Christmas period
- 6) Examine whether Blue-Badge holders should be exempt
- 7) Opportunities for expansion or development
- 8) Business Opportunities

These opportunities combined could generate between £333k and £486k per year in additional income.

#### 1) Restructure of standard charges

The current rate of charges has developed over time and was last reviewed just over 3 years ago. In comparison with other Essex authorities, charges appear substantially lower, particularly the 30 minute charge of 10p and the charge in long-stay car parks for £2.80 for anything over 2 hours, which although in line with authorities if the user is staying for 3 hours, becomes noticeably cheaper than other authorities if they stay longer.

A number of options for amending the car parking charging structure are being discussed and considered. A basic description of the calculation can be found in the notes to calculation included in this business case, with more detailed calculations in the Excel appendix. A simple increase of car parking charges would generate a greater amount of income for the council. Just increasing the cost of parking up to 30 minutes from 10p to 20p would show an increase of income of approx£28k per annum.

#### **OPTION A – Inflation based price increase**

Current car parking charges have been frozen since 2007 and if the car parking prices were to be increased by inflation since 2007 then the amount of additional income could be approximately £225k per annum. This option retains a parking structure understood by the public and offers a minimal change in the 'real' cost of car parking compared to 2007. It does however, continue to reward long-stay and short-stay users whilst it penalises medium stay users who pay substantially above the County average.

#### OPTION B - Above inflation price increase

If all prices were increased at a level above inflation then the additional income for the council could be approximately £164K per annum. As with option A, option B retains a parking structure understood by the public but continues to reward long-stay and short-stay users whilst it penalises medium stay users. Due to the estimated drop in usage from such a large increase, this offers less additional income than option A.

#### **OPTION C – Changed Structure**

Epping Forest current has two different charging structures for their car parks which are based on them being either short stay or long stay car parks. This option proposes removing this distinction and introducing a new charging structure for all car parks.. The cost for parking in the car parks under this structure would be £1 per hour up to a maximum charge of £10. The current 30 minute charge of 10p has also been increased to 20p. This would give Epping Forest District Council an additional income of approximately £265k per annum. The introduction of this model will require more work to implement but offers an easy to understand, simpler, fairer model which should lead to less overpayments. It will represent a large increase for some of the shorter term charges as the 65p charge becomes £1 and the £1.40 charge becomes £2.

#### OPTION D - Rest of Essex - Max

Increasing Epping Forest District Council's car parking charges to the maximum charges that the rest of the authorities in Essex currently charge could result in an additional income of approximately £266k per annum. These are very high charges and a substantial reduction in usage has been factored in. This option will allow the greatest level of income but not by much and it is suggested that this will heavily reduce car park usage and may have a large impact on the town centre.

#### **OPTION E - Rest of Essex - Average**

Increasing Epping Forest District Council's car parking charges to the average charges that the rest of the authorities in Essex currently charge could result in an additional income of approximately £124k per annum. This option brings charges in line with other authorities, increasing charges for the shorter term and reducing them for the medium term parker whilst continuing to maintain the existing structure. However, due to the reduction in the 2 hour and above charge, the increase in income is not as high as in some of the other presented options and there is a substantial increase in the current 30 minute charge.

The Council will obviously be concerned to ensure that it is not seen by its residents as merely trying to raise income by just charging for more. Any increase in prices could be accompanied by a guarantee, that as for the preceding three years, the new charges will not be raised for a period of years after their introduction.

#### **SUMMARY TABLE:**

SUMMARY	12 Month usage	12 Month income	Average Charge	Increase	% Increase
Current	1275163	£1,408,380.13	£1.10	£0.00	0.00%
Option A	1211405	£1,633,796.07	£1.35	£225,415.93	16.01%
Option B	1020130	£1,572,053.55	£1.54	£163,673.41	11.62%
Option C	1020130	£1,672,881.92	£1.64	£264,501.79	18.78%
Option D	573823	£1,674,732.84	£2.92	£266,352.71	18.91%
Option E	1211405	£1,531,956.07	£1.26	£123,575.93	8.77%

#### **Charging Structure summary:**

Each option above brings with it a unique set of advantages and disadvantages. Options B and D however, may not be popular, as it may be felt that these increases would be too high, particularly in the case of Medium term users and would reduce usage of the car parks so far that either income or the local economy could be negatively impacted in comparison with the other options.

Options A, C and E all offer varying advantages but all have merit. Option C may be seen as being easier to 'sell' to residents as it is not merely increasing parking charges, but changing the structure to make them simpler and fairer for all residents regardless and also not rewarding those who park for longer. The new structure should also reduce the amount of overpayment currently made by residents because they lack change. Option A and E both offer the reassurance of the existing pricing structure along with increases that are not excessive and how these have been calculated can be clearly demonstrated.

In addition – should the Council wish – it could consider providing a number of free short term bays in the car parks and removing the 30 minute parking band. This would mean that those people needing to park merely for 15 minutes could do so without payment at all. This option has not been modelled but could be useful in order to understand the impact on parking income.

Finally – should the Council wish – it could consider upgrading the 'chip' in the current car parking machines to allow payments for sequential parking where any overpayments are converted into minutes for parking. For example if parking was 75p for an hour and £1 was inserted – the customer would attain 1h20m.

In determining which, if any option to pursue in terms of the main parking structure, any decision should be taken as part of a full consideration of all of the different parking charge options included in this business case and it is suggested that figures and assumptions around usage patterns are validated.

#### 2) Charging for parking on Saturdays

Saturday charges are levied only in Short stay car parks and not levied in any long stay car parks following a cabinet decision in December 2006 where it was agreed to remove previous charges at all long stay car parks with the subsequent loss of income to the Council. It was agreed at this Cabinet meeting to keep the provision of Saturday charging under review but they remain free and by re-introducing charges in long stay car parks on Saturday it would increase income for the Council by approximately £79k per annum.

Anecdotes suggest that the free Saturday car parks do occasionally fill with retail staff and prevent shoppers from parking; reintroducing charges may encourage them to use alternative modes of transport.

#### 3) Charging for parking on Sundays and Bank Holidays

The Council does not currently charge for parking on either Sundays or Bank Holidays. Under the current fee structure, it has been estimated that charging on Sundays and Bank Holidays could increase income for the Council by approximately £81k per annum after taking into account additional enforcement costs. Sunday or Bank holiday charges have never been implemented in the District and would represent a substantial change.

#### 4) Charging for parking in the evenings.

The Council currently only charges for parking between the hours of 0800 and 1800. Under the current fee structure, it has been estimated that introducing charges for evening parking could increase income for the Council by approximately £28k per annum after taking into account additional enforcement costs. This assumes a 2% uptake in chargeable usage by extending charging hours from 1800 until 2000. Anecdotal evidence suggests that evening usage in the majority of car parks is minimal. It may be worthwhile, however, to create a policy to ensure that individual car park's chargeable hours are not amended independently

#### 5) Maintaining charges throughout the Christmas period

Historically, the Council has removed parking charges for a number of days over the Christmas period. Usually all Saturdays in December are offered free. Similar practices are common at other authorities; however, this practice results in a loss of income to the Council. Research undertaken at other authorities suggests that the majority of users are often unaware of such schemes and that it would not affect their decision to shop in the town.

It has been calculated that free parking costs the Council approximately £3,500 per day in lost revenue. Removing free parking during this period could generate an additional £14k per annum, assuming it is currently free for four days in December.

#### 6) Examine whether Blue-Badge holders should be exempt

The Council has a legal requirement to provide those who hold a 'Blue-Badge' and are therefore registered disabled, with sufficient suitable parking facilities. However, the Council can charge for these spaces yet these are currently offered for free.

Many authorities do charge for blue-badge parking but it remains a particularly sensitive area. Some Councils have introduced charges at the same level as other car park users and have faced legal challenges for doing so. Both Norwich City and Lincoln City council have adopted 'pay for 1 hour, get 1 hour free' recognising the extra time it can take people with disabilities to shop. Welwyn and Hatfield Council were successfully challenged by the Local Government Ombudsman after introducing charges in April 2010.

If the council were to follow Norwich and Lincoln City Council's example and introduce a parking fee offering a second hour for free it is estimated that an additional £22k per year could be generated.

#### 7) Opportunities for expansion or development

Council staff continue to identify a number of opportunities for development which will form part of the narrative of this business case although will not be costed out.

Opportunities include:

- The Churchill car park which was used minimally and has now been closed due to antisocial behaviour.
- The car parks at Epping which are noticeably larger and busier than other car parks and there may be scope to expand these.

#### 8) Business Opportunities

Business opportunities such as allowing a car wash franchise into the car parks are currently

under consideration separately but would merit discussion in this business case.

#### Discounted opportunities

A number of other opportunities were raised as part of this process but have been discounted at board level. These included the introduction of barrier controlled 'pay on exit' car parks which was believed to have been too expensive to introduce and the opportunity to sell or lease the car parks to an external organisation such as the NCP was also discounted.

#### Other considerations

In order to pursue these opportunities, more detailed modelling is recommended to ascertain the exact impact on usage and capacity as well as incorporating price changes into a wider parking strategy which considers the objectives of parking strategy and their impact on residents, traders and the overall local economy. Despite the recent creation of the on-street parking partnership which has been out of scope for this review, when discussing the wider parking strategy it will become important to consider these together.

## Projected additional income

		Year 1	Year 2	Year 3	Total						
Gross	Charge Restructure										
projected income (£)	Option A	£225,416	£225,416	£225,416	£676,248						
221001110 (2)	Option B	£163,673	£163,673	£163,673	£491,020						
	Option C	£264,502	£264,502	£264,502	£793,505						
	Option D	£266,353	£266,353	£266,353	£799,058						
	Option E	£123,576	£123,576	£123,576	£370,728						
	Saturdays	£78,925	£78,925	£78,925	£236,775						
	Sundays and Bank Holidays	£100,925	£100,925	£100,925	£302,775						
	Evenings	£28,167	£28,167	£28,167	£84,501						
	Christmas	£14,000	£14,000	£14,000	£42,000						
	Blue Badges	£21,960	£21,960	£21,960	£65,880						
Investment	Charge Restructure										
costs (£)	Option A	-£10,000	£0	£0	-£10,000						
	Option B	-£10,000	£0	£0	-£10,000						
	Option C	-£30,000	£0	£0	-£30,000						
	Option D	-£10,000	£0	£0	-£10,000						
	Option E	-£10,000	£0	£0	-£10,000						
	Saturdays	£0	£0	£0	£0						
	Sundays and Bank Holidays	-£20,000	-£20,000	-£20,000	-£60,000						
	Evenings	-£4,000	-£4,000	-£4,000	-£12,000						
	Christmas	£0	£0	£0	£0						
	Blue Badges	£0	£0	£0	£0						
Net	Option A	£435,393	£445,393	£445,393	£1,326,179						

projected income (£)	Option B	£373,650	£383,650	£383,650	£1,140,951
income (x)	Option C	£454,479	£484,479	£484,479	£1,423,436
	Option D	£476,330	£486,330	£486,330	£1,448,989
	Option E	£333,553	£343,553	£343,553	£1,020,659

#### Notes to Calculation

#### 1) Restructure of standard charges to a flat rate

A number of options have been proposed as part of this business case, labelled options A to E and are presented below:

#### **CURRENT:**

The current charging structure, income and usage figures are displayed below:

	7 O O O O O O O O O O O O O O O O O O O										
	Short & Long Stay	Short & Long Stay	Short & Long Stay	Short & Long Stay	Short Stay	Short Stay					
Summary	Up to 30 mins	Upto 1 Hour	Up to 2 Hours	Over 2 hours	Up to 3 hours	Over 3 hours	TOTAL				
	£0.10	£0.65	£1.40	£2.80	£2.80 £9.00						
12 Monthly Usage	285941	329235	499765	123925	33475	2821	1,275,163				
12 Monthly Usage %	22.42%	25.82%	39.19%	9.72%	2.63%	0.22%	100.00%				
12 Monthly Income	£28,594.13	£214,002.53	£699,671.47	£346,990.93	£93,729.07	£25,392.00	£1,408,380.13				
4035 JI T 0/	0.000/	47.400/	40.000/	0.4.0.40/	0.000/	4.000/	100.000/				

#### Modelling

As a shift in charges may lead to an increase or reduction in demand and a reduction in overpayments due to a simplified structure, a % reduction in income has been modelled for each option and is displayed in the following table. Due to limitations of the parking payment machines, it is currently not possible to calculate the level of overpayments, but it is estimated that in some cases this may be quite high, particularly given the 65 pence charge for 1 hour. For simplicity, the reduction in demand and reduction in overpayments have been combined. Actual figures can be seen in the table below:

		nth Increase crent Levels		Month Total Income	Reduction in Demand		Income Lost	Inc	12 Month crease with Reduction	12 Month Total with Reduction	Percentage Increase
Current	£	-	£	1,408,380.13	0.00%	£	-	£	-	£1,408,380.13	0.00%
Option A	£	311,405.20	£	1,719,785.33	5.00%	£	85,989.27	£	225,415.93	£1,633,796.07	16.01%
Option B	£	556,686.80	£	1,965,066.93	20.00%	£	393,013.39	£	163,673.41	£ 1,572,053.55	11.62%
Option C	£	858,799.01	£	2,091,102.40	20.00%	£	418,220.48	£	440,578.53	£1,672,881.92	18.78%
Option D	£ 2	,313,248.40	£	3,721,628.53	55.00%	£	2,046,895.69	£	266,352.71	£1,674,732.84	18.91%
Option E	£	204,205.20	£	1,612,585.33	5.00%	£	80,629.27	£	123,575.93	£1,531,956.07	8.77%

#### **OPTION A - Inflation:**

If car parking charges are increased by the standard rates of inflation from 2007-2011 inclusive (rates in Appendix A) then the following figures may be achievable:

	Short & Long Stay	Short Stay	Short Stay				
Summary	Up to 30 mins	Up to 1 Hour	Up to 2 Hours	Over 2 hours	Up to 3 hours	Over 3 hours	Total
	£0.20	£0.80	£1.70	£3.30	£3.30	£10.70	
12 Monthly Usage	271644	312773	474777	117729	31801	2680	1211405
12 Monthly Usage %	22.42%	25.82%	39.19%	9.72%	2.63%	0.22%	100.00%
12 Monthly Income	£54,328.85	£250,218.35	£807,121.01	£388,505.92	£104,943.08	£28,678.85	£1,633,796.07
12 Monthly Income $\%$	3.33%	15.32%	49.40%	23.78%	6.42%	1.76%	100.00%

#### **OPTION B – Increased Prices**

If car parking charges were given a more substantial increase then the following figures may be achieved:

	Short & Long Stay	Short Stay	Short Stay				
Summary	Up to 30 mins	Up to 1 Hour	Up to 2 Hours	Over 2 hours	Up to 3 hours	Over 3 hours	Total
	£0.20	£1.00	£2.00	£3.50	£3.50	£10.00	
12 Monthly Usage	228753	263388	399812	99140	26780	2257	1020130
12 Monthly Usage %	22.42%	25.82%	39.19%	9.72%	2.63%	0.22%	100.00%
12 Monthly Income	£45,751	£263,388	£799,625	£346,991	£93,729	£22,571	£1,572,053.55
12 Monthly Income %	2.91%	16.75%	50.86%	22.07%	5.96%	1.44%	100.00%

#### **OPTION C – Change of Structure:**

If the current car parking charges structure was abolished and a new structure was introduced where it would cost £1 per hour then the following figures may be achieved:

	Combined	Combined	Combined	Combined	Combined	Combined
Summary	Up to 30 mins	Up to 1 Hour	Up to 2 Hours	Up to 3 hours	Up to 4 hours	Up to 5 hours
	£0.20	£1.00	£2.00	£3.00	£4.00	£5.00
12 Monthly Usage	228,753	263,388	399,812	61,479	20,731	15,548
12 Monthly Usage %	22.42%	25.82%	39.19%	6.03%	2.03%	1.52%
12 Monthly Income	£45,751	£263,388	£799,625	£184,436	£82,924	£77,741
12 Monthly Income %	2.73%	15.74%	47.80%	11.03%	4.96%	4.65%
	Combined	Combined	Combined	Combined	Combined	
Summary	Up to 6 hours	Up to 7 hours	Up to 8 hours	Up to 9 Hours	Up to 10 hours and above	Total

	Combined	Combined	Combined	Combined	Combined	
Summary	Up to 6 hours	Up to 7 hours	Up to 8 hours	Up to 9 Hours	Up to 10 hours and above	Total
	£6.00	£7.00	£8.00	£9.00	£10.00	
12 Monthly Usage	10,140	10,140	5,070	4,056	1,014	1,020,130
12 Monthly Usage %	0.99%	0.99%	0.50%	0.40%	0.10%	100.00%
12 Monthly Income	£60,838	£70,978	£40,559	£36,503	£10,140	£1,672,882
12 Monthly Income %	3.64%	4.24%	2.42%	2.18%	0.61%	100.00%

Please not that the usage figures for the car parks where cars are parked for over 3 hours have been calculated by splitting the current usage figures for over 3 hours and is therefore an estimation.

#### **OPTION D: Rest of Essex - Maximums**

The following income figures could be achieved if Epping Forest District Council increased their prices to the maximum prices that their neighbouring Essex authorities currently charge:

	U	U		, ,			
	Short & Long Stay	Short Stay	Short Stay				
Summary	Up to 30 mins	Up to 1 Hour	Up to 2 Hours	Over 2 hours	Up to 3 hours	Over 3 hours	Total
	£1.10	£2.20	£3.90	£4.50	£4.50	£9.00	
12 Monthly Usage	128674	148156	224894	55766	15064	1270	573823
12 Monthly Usage %	22.42%	25.82%	39.19%	9.72%	2.63%	0.22%	100.00%
12 Monthly Income	£141,541	£325,942	£877,088	£250,949	£67,786	£11,426	£1,674,732.84
12 Monthly Income %	8.45%	19.46%	52.37%	14.98%	4.05%	0.68%	100.00%

#### **OPTION E: Rest of Essex - Averages**

The following income figures could be achieved if Epping Forest District Council increased their prices to the current average cost of parking that their neighbouring Essex authorities currently charge. The average has been calculated using benchmark data available and this is for 2010/2011 figures.

O	8						
	Short & Long Stay	Short Stay	Short Stay				
Summary	Up to 30 mins	Up to 1 Hour	Up to 2 Hours	Over 2 hours	Up to 3 hours	Over 3 hours	Total
	£0.35	£0.90	£1.70	£2.20	£2.20	£7.20	
12 Monthly Usage	271644	312773	474777	117729	31801	2680	1211405
12 Monthly Usage %	22.42%	25.82%	39.19%	9.72%	2.63%	0.22%	100.00%
12 Monthly Income	£95,075	£281,496	£807,121	£259,004	£69,962	£19,298	£1,531,956.07
12 Monthly Income %	6.21%	18.37%	52.69%	16.91%	4.57%	1.26%	100.00%

#### **Other Considerations**

There may also be a cost saving by being able to remove the requirement for the machines to accept 5p pieces. Cash collection and bank costs were around £2,200 in 2010/2011. Removing 5p's would reduce this, but given the reduction is likely to be quite small it has not been calculated in, although it may make things easier for Staff as well. Detailed calculations of the 5 options above can be found in an Excel spreadsheet that has been provided to the Council as part of the RIO exercise.

#### 2) Charging for parking on Saturdays

Cabinet report *C/067/2006-07* published on 13<sup>th</sup> November 2006 proposed removing the Saturday charges for long stay and combined car parks. It estimated that the loss from offering long-stay car parks free on Saturdays was

£71,150. This figure however was calculated on the income lost from parking in long-stay car parks and did not take into account any displacement from short stay to long stay car parks so the actual figure of lost parking income may have been higher.

Given that the figure of £71,150 is from 2006, it has been assumed that potential income would be approximately 10% higher given the increase in charges in 2007 (£78,925).

#### 3) Charging for parking on Sundays and Bank Holidays

An assumption has been made that income achieved would be approximately 50% of the income generated on a Saturday. Cabinet report C/067/2006-07 suggests that combined income from short and long stay car parks for a year of Saturdays was £183,500 in 2006. For a Sunday, this would be £91,750. Given a 10% increase due to the 2007 increase in charges, this could be £100,925

£20,000 of extra enforcement costs are also likely to be incurred due to additional staffing and collection costs, leading to a potential net additional income of £80,925.

#### 4) Charging for parking in the evenings.

Increasing the chargeable hours may only have a minor effect on overall income and despite increasing operating hours by 10-20%, the Council could only expect an increase in income of approximately 2%.

£1408380 \* 2% = £28,167

An increase in enforcement costs of £4,000 per year has been calculated due to additional staffing costs.

#### 5) Maintaining charges throughout the Christmas period

Cabinet report C/067/2006-07 published on 13th November 2006 proposed removing the Saturday charges for long stay and combined car parks. It estimated that charges for each Saturday raised £2,900. Given the increase in charges in 2007 following this report, the proposed increase in charges in this report and the increased level of parking in December, an increase of approximately 20% has been assumed. This would result in an additional £3,500 per Saturday if charges were reintroduced, or £14,000 per year assuming the removal of charges currently applies to four Saturdays in December.

#### 6) Examine whether Blue-Badge holders should be exempt

There are 30 disabled spaces operated by the Council across all car parks and is proposed to charge the standard charges.

It is suggested that a discounted regime is applied whereby the 1st 2 hours would be charged at a single hour rate and 3 or 4 hours would be charged the equivalent of a 2 hour rate. Given this, it has been estimated that each of the 30 bays would generate an average of 3 paying visits per day at an average of £0.80 per stay (given that the majority will stay for under 2 hours), generating an average per bay of £2.40

Assuming that charges are upheld 305 days per year (no Sundays or Bank Holidays) and that Saturday charges are adopted this would generate  $\pounds 21,960$  of additional income for the Council.

 $*305 \times £2.40 \times 30 = £21,960$ 

#### All

It is assumed that any other increases in workload could be consumed within current resources at no additional cost.

Costs of £10,000 in Year 1 have been modelled in to reflect the review, consultation and signage changes, option C has increased costs of £30,000 due to the additional workload involved in amending the charging structure.

See Appendix A for details on car park spaces calculated from the Council's website.

#### **Assumptions**

Assumptions as above.

To proceed with this business case it is recommended that further work to forecast demand including monitoring of usage is undertaken by the Council.

#### Key evidence including relevant benchmarks

## 1) Restructure of standard charges

A detailed list of benchmarked charges can be found in the separate appendix and their averages and maximums are used to inform options D and E respectively.

Overall, these figures demonstrate that Epping Forest District Council remains cheaper than average for short term (up to 2 hour) users and for long term users (over 4 hours) but around or just above average for medium term users (between 2 and 4 hours).

Broxbourne charges are very similar to Epping District Council, with 30 mins costing 30p, 1 hour costing 60p, up to 2 hours costing £1.40, 3 hours £2.00 and 4 hours £2.80, 5 hours and above are between £4 and £5.80.

East Herts charges 80p for 1 hour, £1.50 for up to 2 hours, £2.20 for up to 3 hours, £2.90 for up to 4 and £3.60 for up to 5.

#### 2) Charging for parking on Saturdays

The majority of Car Parks in neighbouring authorities charge on Saturdays and usually operate their standard weekday charging structure. Benchmarked charges can be found in the separate appendix.

#### 3) Charging for parking on Sundays and Bank Holidays

In Essex, Brentwood currently charges a 50p hourly rate in certain car parks and others remain free of charge. Colchester and Chelmsford charge between £1.50 and £2.50 in some car parks.

Many Authorities in Essex do not charge, including Maldon and Rochford. Sunday charging was considered by Maldon but was not approved by Councillors in December 2010, increased weekday charges were approved however.

Outside of Essex Manchester City Council announced in February 2011 that they would introduce Sunday charging and extending hours to 7pm across the City as part of their austerity measures, raising approximately £1m in extra income.

Barnet Council charge standard rates for parking on Bank holidays and Sundays in all car parks and advertise that, with the exception of Christmas Day (public holiday), all bus lanes and all on-street and off-street parking restrictions may be enforced unless street signs indicate otherwise.

#### 4) Charging for parking in the evenings

The Station NCP car park charges a reduced 'off-peak' rate of  $\pounds 2.30$  for the evening which lasts from 1600-0400. Many Essex authorities do charge and a detailed list of benchmarked Essex charges can be found in the separate appendix B.

**Outside of Essex:** 

- Guildford Borough Council have introduced charging in Guildford's main car parks from April 2010, this is estimated to raise the Council an extra £160,000 with a flat fee of £1 per evening.
- Other authorities to have introduced evening parking charges recently include Aylesbury Vale Council, Stoke on Trent City Council, West Suffolk District Council.
- All Kingston car parks that open on Sundays charge standard rates and charge a £1 flat fee in the evenings (as of February 2008)

#### 5) Maintaining charges throughout the Christmas period

Many authorities choose to reduce or remove charges at the Christmas period; this is generally done as a gesture of good-will by the Council to support both local residents and local businesses but is often done at a substantial cost to the Council.

Basildon council offered parking free in the 4 weekdays in the run up to Christmas in 2010. The council admitted the scheme cost it £9,000. Billericay Chamber of Commerce felt that this was ineffective and suggested increasing capacity as a better move to help businesses.

LB Richmond has previously offered free parking in the 4 car parks where bank holidays are currently charged for. The loss per bank holiday for the Council is approximately £10,000. Added to this figure is the cost of implementation which is mainly for the required posters and advertising which adds a further £600. Vehicle usage counts carried out

on the day showed that there was little variation in usage of the car park from previous bank holidays when charges were in place. This was borne out by the one to one interviews undertaken with motorists parking in these car parks who were generally unaware of the change despite the £600 spend on advertising and the charges would not have stopped them from coming in.

#### 6) Examine whether Blue-Badge holders should be exempt

The Council has a legal requirement to provide those who hold a 'Blue-Badge' and are therefore registered disabled, with sufficient suitable parking facilities. The Council can charge for these spaces yet these are currently offered for free.

Rochford DC list that Blue Badge Holders are not exempt from the requirement to purchase and clearly display a valid ticket unless they hold vehicle excise licence exemption.

Cherwell District Council undertook a consultation over new charges for disabled drivers and a number of concessions have been agreed to make the process easier. "Blue badge holders are being offered a further 25 per cent season ticket discount, on top of a saving of up to 37 per cent they already provide for regular car park users."

"A flat fee is being introduced for evening parking but this will remain free for those with blue badges. They will also be able to make use of the council's RingGo system - which allows parking payments to be arranged by phone - at no extra charge. There is usually a 20p fee. As originally planned, blue badge holders will receive an extra hour free parking on top of whatever they pay for."

South Lakeland District Council introduced charges at the start of May for disabled Blue Badge holders to park in its 44 car parks.

Derbyshire CC blue badge holders have to pay £2.20 for the first two hours and then get two hours free.

Hampshire CC has recently introduced charges for disabled parking at its country parks and is hoping to recoup approximately £50,000.

In 2010, Lincoln city council removed free parking for blue badge holders, hoping to save £100,000 a year, but decided to reconsider after a legal challenge in 2011. The city council has now voted for a system where blue badge holders get one hour free parking for every hour paid for. The same policy, challenge and response occurred at Norwich City Council also.

#### Summary of analysis and consultation

Volume data and prices to be confirmed by Kim Durrani and Paul Blamey

PwC produced the business case, utilising information provided by the Council.

#### Issues and Risks

Issue/ Risk	Impact (H / M / L)	Proposed management actions
Displacement parking to residential streets will occur and thus there could be an adverse reaction from local residents	Medium	Ensure that this is well managed during consultation period, drawing attention to other recent parking changes
Some users may chose to use alternative means of transport or alternative locations	Low	Ensure that this is taken into account in income projections.
Strong adverse reaction from users, businesses and town centre groups	High	Ensure that this is well managed during consultation period, drawing attention to other recent parking changes
Potential resistance from Members and customers due to proposals being seen as 'anti-motorist'	High	Ensure that Members are fully aware of the income implications and ensure drivers for change and strategic benefits are well communicated.

# Implementation plan: Key project activity and milestones

Key activity	Period			
	1 to 3 months	4 to 6 months	7 months onwards	
Undertake further work to forecast demand including monitoring of usage where appropriate				
Obtain approval from members				
Begin consultation				

# Critical next steps

• Undertake further work to validate figures by forecasting demand including monitoring of usage.

# Business Case Appendix A

# Council operated car parks

	Disabled	_
	Spaces	Total Spaces
BUCKHURST		
HILL		
QUEENS RD		
LOWER	0	46
QUEENS RD		
UPPER	0	18
LOUGHTON		
SMARTS LANE	0	21
HIGH BEECH		
ROAD	2	36
OLD STATION		
ROAD (Sainsbury)	?	270
THE DRIVE	2	41
TRAPS HILL	6	188
BURTON ROAD	0	99
VERE ROAD	-	
EPPING		
CIVIC OFFICES	3	24
BAKERS LANE	0	141
COTTIS LANE	6	232
WALTHAM		
ABBEY		
QUAKER LANE	4	108
CORNMILL		197
DARBY DRIVE	2	66
ONGAR		
SAINSBURYS		
THE PLEASANCE	2	73
BANSONS LANE	3	52
2.2.100110 241112		0≈

Car Park Income FY 2010/2011

AREA	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
Traps Hill	12,916.20	12,028.40	13,587.70	14,200.30	12,574.35	12,697.70	13,293.10	12,724.05	11,429.65	13,025.70	13,391.65	14,614.10
The Drive	5,590.95	5,270.30	6,242.35	6,003.15	5,305.80	6,650.15	5,908.05	5,933.50	5,745.95	5,488.00	5,224.60	5,846.70
High Beech	3,881.50	3,829.35	4,629.50	4,217.95	3,672.80	4,672.15	4,456.85	4,139.15	3,819.85	3,814.15	3,988.95	4,389.40
Smarts Lane	1,254.90	1,312.05	1,678.10	1,379.35	1,325.35	1,712.55	1,295.95	1,449.10	1,414.15	1,408.60	1,199.15	1,315.85
Sainsbury's Loughton	21,712.45	21,277.10	24,641.30	23,787.25	20,464.95	24,819.90	23,186.35	24,846.85	25,634.55	22,290.30	20,989.40	22,400.05
Burton Rd Main	5,317.65	4,110.90	4,091.25	4,909.35	4,119.05	5,202.75	4,498.55	4,618.95	5,542.95	4,425.00	4,904.85	5,933.75
Vere Road	1,762.10	1,327.70	1,423.15	1,929.70	1,354.40	1,776.00	1,348.00	1,491.25	1,897.25	1,189.90	1,440.55	1,916.70
Bakers Lane	6,594.50	6,711.70	6,930.80	6,649.20	6,076.15	7,178.90	7,130.85	6,941.75	6,556.40	6,176.45	6,903.45	7,248.70
Cottis Lane	16,159.80	15,420.15	17,427.30	17,099.80	15,829.65	17,991.10	17,731.35	17,310.55	18,519.20	15,343.70	16,303.80	17,606.40
Civic Offices	178.80	258.65	281.85	240.20	187.75	246.85	0.00	0.00	0.00	417.35	235.85	187.80
Cornmill	2,251.20	1,827.30	2,239.65	2,330.70	2,305.95	2,229.45	1,718.45	2,006.30	1,533.50	1,416.85	1,960.55	2,335.30
Quakers	4,780.10	4,333.65	4,962.20	4,977.95	5,322.35	5,043.90	4,450.90	4,796.20	4,016.60	3,892.55	4,320.85	5,833.80
Darby Drive	3,196.45	2,960.35	2,973.55	3,117.60	3,064.05	3,357.05	3,221.85	3,604.85	3,270.35	2,971.15	3,153.75	3,774.05
Pleasance	3,258.75	2,859.25	2,883.45	3,305.45	2,552.60	2,747.65	3,298.65	3,142.10	3,532.15	3,083.55	3,185.40	3,376.05
Bansons	4,012.25	3,280.90	3,800.05	4,004.20	3,213.45	3,611.10	4,388.55	3,939.70	3,713.10	3,682.00	3,792.55	3,910.65
Sainsbury's Ongar	5,577.15	4,934.35	5,430.40	5,785.55	4,816.40	5,016.05	5,711.60	5,296.70	5,609.40	4,736.30	4,881.65	5,055.25
Lwr Queens Road	4,618.45	5,005.05	6,163.00	5,033.80	4,674.60	5,697.45	4,933.15	5,863.40	4,406.35	5,460.40	5,088.10	5,755.75
Queens Road	1,267.40	1,472.20	1,734.45	1,468.55	1,283.10	1,682.30	1,431.30	1,756.00	1,224.45	1,454.10	1,364.60	1,572.60
Queens Rd (On Street)	6,373.65	6,371.75	7,322.50	7,060.00	6,832.70	6,857.90	6,459.65	7,659.95	5,953.95	5,489.75	5,944.10	7,924.50
High Rd (On Street)	3,848.45	3,643.50	3,643.50	3,793.45	3,626.50	4,288.85	4,046.95	3,665.55	4,520.35	3,238.70	3,697.75	4,310.60
TOTAL	114,552.70	108,234.60	122,086.05	121,293.50	108,601.95	123,479.75	118,510.10	121,185.90	118,340.15	109,004.50	111,971.55	125.308.00

# Inflation rates used (Option A):

2007 - 4% 2008 - 0.9% 2009 - 2.4% 2010 - 4.8%

Aug 2011 - 5.2%

Opportunity Title	Solar PV energy generation – Civic Offices
Subject / service area	Corporate Services

# Opportunity type and description

Cost recovery	Restructured charges	New income stream	Traded service

# Opportunity description

NOTE: This business case has been amended to take into account the reduction in Feed-in-tariffs announced by the Department of Energy and Climate Change (DECC) on the 31st October where the tariff for large installations below 50KwH was reduced by approximately 50% from 32.9p to 15.2p. The tariff was already set to reduce gradually each year but they have argued that the capital costs for solar panels have fallen far quicker than expected and the rates of return delivered were too high. Although the market was aware this could happen, the fall was far steeper and far sooner than most expected. This has had reduced the level of benefits in this business case. The feed in tariff used is 15.2p per KwH, and does not take into account the effect of any aggregated Solar PV if any other installations go ahead, taking the overall Solar PV generation level over 50KwH across multiple Council sites.

The installed capacity of solar PV in the UK was approximately 32MW in 2009 with annual capacity additions of c.4-5 MW until 2008. However, this compares to 3,300MW added in Germany and 579MW in Italy. UK solar PV capacity development is at least 10 years behind that of Germany. Recently introduced feed in tariffs (FITs) have managed to kick-start the roll out of solar in the UK. The "Feed-In Tariff" is fixed for 25 years (index linked) to help offset the high one-off capital cost of installing Solar PV to generate electricity. Any electricity that is generated is then free to use, and any unused electricity can then be sold to the National Grid making up the three strands of the financial benefit to installing Solar PV. FITs have been highly successful in continental Europe at driving rapid increases in solar PV market; in many European countries annual installations increased in excess of 300% in the first year of feed in tariffs.

The Council will shortly be completing its first installation of Solar PV at the community centre at Limes Farm. This is being undertaken as part of the redevelopment of the community centre under a new multi-agency approach. The community centre is due to be handed over from the construction company in November and the Council will then begin to feel the benefits of the Solar PV installation. The Council is also at the design stage on a potential new depot and the business case for Solar PV in this project is currently under investigation. A business case has also been developed for Solar PV on housing which is will shortly be going to scrutiny panel. However, due to the nature of how energy is used, mostly during the day in commercial buildings in contrast with domestic buildings where energy use is highest in the evening, the Civic Offices in Epping may be a prime contender and offers 390m² of the necessary south facing roof.

At the Civic Offices, a large amount of work has already been undertaken to increase the energy efficiency of the various buildings via double glazing, additional insulation, room lighting sensors and intelligent energy monitoring and management software. These improvements, along with others have allowed the Council to reduce energy consumption and in 09/10 and 10/11 combined, this has saved the Council approximately £77,000 and improved the energy consumption rating from a 'G' to a 'D' rating. There are a number of further improvements in the pipeline such as a new boiler and some lighting replacements. In isolation these are unlikely to help improve the rating of the building to a 'C' although the installation of Solar PV could assist in achieving this milestone. Money has previously been allocated for Solar PV under the capital programme but no business case was prepared and this was removed for cost savings.

Solar PV offers three key benefits, money paid from the FITS as discussed, free electricity for the Council to use and money for any electricity sold back to the grid. Initial calculations suggest that by using approximately  $300\text{m}^2$  of South facing roof space to install 150 Solar Panels, the council could generate around 35,000km yearly, generating approximately £5,315 in income from the feed-in tariff, saving £4,375 in electricity and £108 from exporting energy back to the grid every year, a yearly saving of £5,398 after maintenance costs. At a cost of around £123,100 to install, this would take 13 years and 7 months to payback the initial cost and equates to an AER of

3.11%. There is still scope to increase the KwH generated by approximately another third (up to 200 panels approximately) and remain within the 50KwH barrier necessary for the Feed-in-Tariff. By using even more roof space where feasible, the Council could likely further reduce the payback period and increase the AER. It has also been calculated that this may save the Council approximately 20 tonnes of Co2 per year.

An alternative business model to the one proposed is where a 3<sup>rd</sup> party organisation installs the panels at their own cost, retaining the FIT for themselves and absorbing any maintenance costs, however the Council would get to keep the electricity saved. Solar PV is becoming increasingly popular with Councils who are adopting varying business models and examples of individual case studies can be found in the evidence section of this business case.

In order to proceed with this business case, it is suggested that a more detailed cost analysis is undertaken, structural surveys of the south facing roofs are carried out and quotes obtained from suppliers.

#### Projected additional income

Annual Net Income	£5,398 year 1 rising to £31,458 year 25
Installation Costs	£123,170
Total Net Income	£257,094
Payback Period	13 years, 7 months
AER	3.11%

<sup>\*</sup>Detailed year by Year income can be found below and in Appendix A

#### Notes to Calculation

In order to maximise the generation of electricity, it is advisable that only South-facing roofs are used. The Council has approximately  $390m^2$  of south facing roof in the Civic Offices,  $340m^2$  on the Conder building and  $50m^2$  on 323 House. A list of other potential buildings can be found in appendix A.

For an initial calculation this has assumed the use of 150 Suntech STP280-24/Vd solar PV panels. If used solely on the Civic offices, these panels would occupy 75% of the total south facing roof space of both buildings combined. 150 solar PV panels of 280wph assuming a south facing roof and an elevation of 35 degrees in a 'Central UK' location (amongst other assumptions in the assumptions section below) would generate approximately 34,968kwh.

In the first year this would generate £5,315 in income from the feed-in tariff, save £4,374 in electricity costs and create £108 income from exporting energy back to the grid. Maintenance costs have been calculated by the facilities team and are described below.

- The panels require minimal maintenance and offer a 10 year warranty but an annual inspection has been proposed by the facilities team given the relative age of the market. It may be that if minimal problems are reported in the first couple of years, this inspection is reduced or only takes place if there is a noticeable reduction in energy generation as monitored.
- Because access is required to the roof a lorry mounted boom / hoist will be required and this requires a 3 man team to reach all parts. Manpower required will be £2,880 \*(3 men x 8 hours x 2 days = 48 hours @ £60 ph) and a Lorry mounted Boom / hoist for 2 days at a cost of £1450.00. The total of £4,330 has been rounded up to £4,400 to take into account any minor incidentals or expenses. This cost has been increased yearly at the rate of APR for the life of the installation.

This business case assumes the use of Suntech STP280-24/Vd panels. The Suntech panels are not the cheapest available but offer an excellent compromise between cost, efficiency, size and maintenance. Alternative panels from companies such as Mitsubishi may be used but this may affect the key figures in the business case.

Given estimated installation costs of £123,170, and maintenance costs of £4,400 annually this would mean a profit of £257,094 over the 25 year lifespan of the panels, a return on investment of around 8.35% per year or around 3.11%

annual equivalent interest rate (AER). This equates to a payback period of 13 years and 7 months.

A list of assumptions behind these calculations can be found in the below table, and a detailed year-on-year analysis of figures can be found in Appendix A.

# **Assumptions**

- Daytime electricity rate: £0.139 per kWh (inc VAT)
- Standard export rate of 3.1p kWh
- The install type is to an existing building
- 90% of the energy generated will be used by the building
- The benefits are assessed over a 25 year period
- Assume RPI 3.584% and annual energy price inflation of 9%
- The roof angle is 35° (or panel mounting angle if standalone)
- The roof is south facing and in a central UK location
- Assume panel degradation to 80% of year 1 output after 30 years
- Assume inverter lifetime of 25 years
- Assume cable/inverter system losses of 18% of output
- Solar radiation and system losses due to Temperature 6.6%
- Solar radiation and system losses due to Angular Reflectance 3.1%
- Installation and certification takes place before April 2013

If installation does not take place until the financial year 2013/2014 then income will be reduced to approximately £446k over 25 years, representing an AER of 5.51% and a payback period of 9 years, 3 months. Full details on the reduction can be found on the accompanying Excel document.

#### Key evidence including relevant benchmarks

Generation payment levels vary depending on the technology and total installed capacity of the installation. Export payments are currently set at 3.1p/kWh for all electricity exported onto the national grid regardless of technology or capacity. The generation and export tariffs are amended by Ofgem prior to the start of each FIT Year in accordance with changes to the Retail Price Index (RPI). Tariff information is available from Ofgem's website: <a href="https://www.ofgem.gov.uk/fits">www.ofgem.gov.uk/fits</a>.

#### **Useful links**

http://www.energysavingtrust.org.uk/business/Business/Local-Authorities/Funding/Feed-in-Tariffs

 $\frac{http://www.carbontrust.co.uk/cut-carbon-reduce-costs/products-services/technology-advice/renewables/Pages/Solar-electricity-photovoltaics.aspx$ 

Carbon trust info and calculations:

http://www.therenewableenergycentre.co.uk/power-from-the-sun-(photovoltaics)/

http://www.theecoexperts.co.uk/solar-pv-systems-local-authority-buildings

For community electricity (not just on own building for own use):

http://ceo.decc.gov.uk/

#### **Specific case studies**

- Hampshire CC: <a href="http://www.solarguide.co.uk/hampshire-county-council-looking-to-invest-in-solar-energy">http://www.solarguide.co.uk/hampshire-county-council-looking-to-invest-in-solar-energy</a>
- Surrey CC <a href="http://www.sustainablegov.co.uk/local-government/energy-and-climate-change-local-government/solar-panels-will-generate-up-to-2-million-pounds">http://www.sustainablegov.co.uk/local-government/energy-and-climate-change-local-government/solar-panels-will-generate-up-to-2-million-pounds</a>
- Redhill <a href="http://www.redhillcouncillors.co.uk/2011/09/county-council-to-invest-in-solar-energy-to-save-taxpayers-money/">http://www.redhillcouncillors.co.uk/2011/09/county-council-to-invest-in-solar-energy-to-save-taxpayers-money/</a>
- South bucks <a href="http://www.southbucks.gov.uk/news/solar\_panels.aspx">http://www.southbucks.gov.uk/news/solar\_panels.aspx</a>
- Fareham <a href="http://www.thisishampshire.net/news/9042952.Council\_plans\_a\_solar\_future/">http://www.thisishampshire.net/news/9042952.Council\_plans\_a\_solar\_future/</a>

## Summary of analysis and consultation

Volume data and prices confirmed by Paul Pledger and Mike Tipping.

PwC produced the business case, utilising information provided by the Council.

#### Issues and Risks

Issue/ Risk	Impact (H / M / L)	Proposed management actions
Maintenance costs increase payback period and rate of return.	Medium	Technology is now well proven and traditionally comes with a 10 year warranty, important to ensure that provider passes financial toughness test for the warranty, 25 year lifespan of inverter assumed.
Solar PV may be considered an eyesore by some	Low	Building is not listed and is less likely to be objectionable than on historic or domestic properties.
Civic offices are near a conservation area	Medium	Ensure that all stakeholders are consulted on the impact.
Civic Office roof not suitable for the panels	Medium	Survey being undertaken to establish structural integrity of the roof.
Government may amend the Feed-in-tariff subsidy.	High	Closely monitor government publications and ensure that the initial rate of return is high enough to endure a substantial drop in the FiT.

# Implementation plan: Key project activity and milestones

Key activity	Period		
	1 to 3 months	4 to 6 months	7 months onwards
Undertake survey of south facing roof (underway)			
Obtain quotes from suppliers			
Detailed cost analysis and business case is prepared			

# Appendix A

#### Other suitable (North/South) roofs operated by Epping Forest District Council

- 1) Civic Offices Site.
  - a) Conder Building
  - b) Old House.
  - c) Hip ends of Pyramid & Homefield House
- 2) 25 Hemnall Street Epping inc Sports Centre
  - a) Original house.
  - b) All flat roofs except front canopy (in shadow)
- 3) Ongar Leisure Centre (Flat)
  - a) & Parks Store (1 building)
- 4) North Weald Airfield.(nb.EFDC electricity supply)
  - a) Gatehouse (Partially flat )
  - b) Building 240 (Flat)
  - c) Archive Store/HV Intake
  - d) Annexe Hangar1 (south side only)
  - e) Control Tower/Observation deck (south facing side) & top roof only (Flat)
- 5) Oakwood Hill Industrial Estate Workshop Units Loughton (2 buildings)
- 6) Loughton Leisure Centre
- 7) Waltham Abbey Swimming Pool (Flat areas not in shadow)

## Detailed yearly Analysis

Yea r	FIT Income	Export Income	Buying Income	Maintenance	Total net Income	Income Balance after investment
1	£5,315.14	£108.40	£4,374.50	-£4,400.00	£5,398.03	-£117,771.63
2	£5,505.16	£112.28	£4,767.79	-£4,557.70	£5,827.53	-£111,944.10
3	£5,701.24	£116.28	£5,195.78	-£4,721.04	£6,292.25	-£105,651.85
4	£5,902.53	£120.38	£5,660.48	-£4,890.25	£6,793.15	-£98,858.70
5	£6,109.09	£124.59	£6,164.89	-£5,065.51	£7,333.07	-£91,525.64
6	£6,320.97	£128.91	£6,712.23	-£5,247.06	£7,915.05	-£83,610.58
7	£6,537.94	£133.34	£7,305.63	-£5,435.12	£8,541.79	-£75,068.79
8	£6,759.42	£137.86	£7,948.04	-£5,629.91	£9,215.41	-£65,853.38
9	£6,985.36	£142.46	£8,643.17	-£5,831.69	£9,939.32	-£55,914.07
10	£7,215.68	£147.16	£9,394.98	-£6,040.69	£10,717.13	-£45,196.94
11	£7,450.30	£151.95	£10,207.65	-£6,257.19	£11,552.71	-£33,644.23
12	£7,688.44	£156.80	£11,084.70	-£6,481.45	£12,448.49	-£21,195.74
13	£7,929.90	£161.73	£12,030.59	-£6,713.74	£13,408.47	-£7,787.27
14	£8,174.82	£166.72	£13,050.64	-£6,954.37	£14,437.82	£6,650.56
15	£8,422.27	£171.77	£14,148.69	-£7,203.61	£15,539.13	£22,189.68

16	£8,671.93	£176.86	£15,329.80	-£7,461.79	£16,716.80	£38,906.49
17	£8,923.45	£181.99	£16,599.22	-£7,729.22	£17,975.45	£56,881.93
18	£9,176.47	£187.15	£17,962.41	-£8,006.23	£19,319.80	£76,201.73
19	£9,429.73	£192.32	£19,423.23	-£8,293.18	£20,752.10	£96,953.83
20	£9,683.56	£197.49	£20,988.97	-£8,590.40	£22,279.62	£119,233.45
21	£9,936.55	£202.65	£22,663.44	-£8,898.28	£23,904.36	£143,137.81
22	£10,188.08	£207.78	£24,452.10	-£9,217.20	£25,630.77	£168,768.58
23	£10,437.45	£212.87	£26,360.41	-£9,547.54	£27,463.19	£196,231.77
24	£10,683.41	£217.89	£28,392.37	-£9,889.73	£29,403.94	£225,635.71
25	£10,925.63	£222.83	£30,554.28	-£10,244.17	£31,458.57	£257,094.28