# Foundation Training Company (FTC): Analysis of economic impact



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Thank you also to Michael Ridge (Director, Frontier Economics) for providing guidance on methodology.

We hope this report will play its part in building greater understanding and appreciation of the work of FTC as well as highlighting the power and value of economic analysis.

Fraser Thompson

### **EXECUTIVE SUMMARY**

The overarching objective of this work is to provide a rigorous and impartial analysis of the economic impact of the Foundation Training Company's (FTC) community based training centre in Hackney, by evaluating its benefits to society compared to its operating costs.

A conservative approach is adopted to understand the economic impact of FTC's services, whereby we focus primarily on the avoided costs to society associated with re-offending, whilst also providing a narrow estimate of economic activity impact by including salary differentials for re-offenders only one year after release. The broader quality of life aspects are excluded from the analysis, but interviews with FTC clients suggest that this is nonetheless an important part of the benefit of its services.

In order to assess this impact, re-offending rates of a random sample of 377 FTC clients are compared to national figures. Due to the limitations of the available data, we do not have access to the necessary data to do detailed matching of FTC clients to a relevant comparison group. Similarly, we are unable to distinguish the impact of FTC from the specialist agencies (e.g., drug rehabilitation centres) which FTC may send ex-offenders to.

Despite these methodological challenges, when comparing the FTC reoffending rates to the national average, the FTC sample of ex-offenders have significantly lower re-offending rates. The average re-offending rate of FTC clients was approximately 24 percent in 2007-08, whereas at the national level the figures are 28 and 35 percent for ex-offenders who had been in custody for greater than 1 year and between 1-2 years respectively. Differences between FTC and national average re-offending rates are significant at the 5% level (when compared to national offenders who were in custody for greater than 1 year) and at the 1% level (for national offenders who were in custody for 1-2 years), based on a one-sided test. Whilst there are differences between the attributes of FTC clients to those in the national sample, these differences are unlikely to be able to provide an alternative explanation of FTC's significantly lower re-offending rates given the available data.

The net economic impact of FTC's services is calculated by using scenarios of different national comparison groups (of ex-offenders) and different estimates of the costs of re-offending. Based on these different scenarios and the assumptions we have had to make, and taking into account the data limitations outlined in the report, every pound spent by FTC on its Hackney centre could result in £8-17 in net benefits to society. In terms of cost savings per client, the range is from £2,900 to £6,100.

The report concludes by noting several areas where these results could be made more robust through access to improved data.

### INTRODUCTION

The Foundation Training Company (FTC) is a registered charity, focused on the training and guidance of offenders in preparation for release and rehabilitation in the community. FTC approached Pro Bono Economics (PBE) in August 2010 requesting its help in estimating the economic impact of its services to society. PBE commissioned three economists – Fraser Thompson, Andrew Goodman and Tim McEvoy – to conduct this research.

The findings of this work are contained in this short paper. It is structured into five sections:

- I. Objectives of research
- II. Overview of FTC services
- III. Methodology and data
- IV. Main results
- V. Conclusions and next steps

### I. OBJECTIVES OF RESEARCH

From the outset, it is important to clarify what this work is, and is not. The overarching objective of this work is to provide, as far as possible, a rigorous and impartial analysis of the economic impact of the Foundation Training Company's (FTC) community based training centre in Hackney, by evaluating its benefits to society versus its costs. The exact methodology used in this work is described in further detail in the methodology section of the report. This work does not attempt to provide an assessment of FTC's strategy or recommendations for how it could improve its economic impact.

### II. BACKGROUND ON FTC

The cost of re-offending is extremely high in the UK. Crime committed by exprisoners costs the economy at least £11bn per year.<sup>2</sup> The Confederation of British Industry (CBI) has estimated that reducing the re-offending rate of ex-prisoners by just 10% could save over £1bn for the UK economy annually.<sup>3</sup>

FTC is a registered charity which aims to substantially reduce re-offending rates, by providing counselling, basic skills training and referral to specialist support services (e.g., drugs and alcohol treatment, education providers, housing, etc). By

<sup>&</sup>lt;sup>2</sup> The Social Exclusion Unit, "Reducing re-offending by ex-prisoners", July 2002

<sup>&</sup>lt;sup>3</sup> "Getting back on the straight and narrow: A better criminal justice system for all.", Confederation of British Industry (CBI) and the Centre for Criminal Justice, April 2008.

providing these services, FTC aims to help ex-offenders deal with the range of pressures they face upon release, including poor basic skills, finding suitable work and housing, dealing with addictions and rebuilding relationships with friends and family. FTC has three main services that it offers (Exhibit 1):

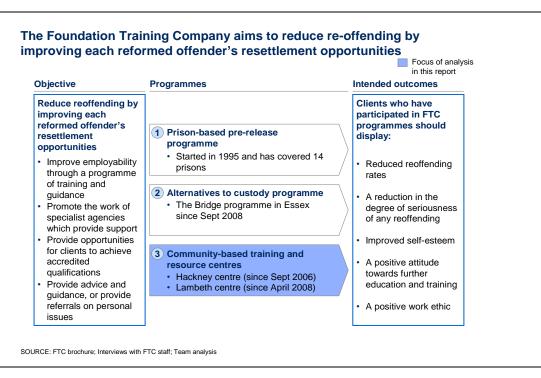
- 1. Prison-based pre-release programme: FTC started its first internal prison programme in 1995 at Feltham Young Offenders Institute. FTC now operates custodial programmes which take place in custody to prepare offenders for release in 2 prisons, and have operated in 14 prisons since FTC was founded. The custodial programme starts with a resettlement needs analysis to assess an offender's housing, employment, training and education arrangements to develop a Personal Action/Resettlement Plan. The second phase of the programme is a resettlement course delivered over several weeks which provides key skill training building towards the achievement of nationally recognised certification. The third and fourth phases of the programme provide resettlement support and evaluation. Over 11,000 offenders have completed FTC's resettlement course, with 95% achieving at least one nationally recognised award.
- 2. Alternatives to custody programme: FTC has operated "The Bridge" programme with Essex Probation since September 2008, which provides an alternative to custody (A2C) for magistrates. Magistrates can place offenders onto a community order which includes The Bridge as a specified activity The Bridge provides 15, 23 or 30 days of specified activities alongside a 6-12 month Supervision Requirement. The programme includes support from a mentor and specified classroom work.<sup>4</sup>
- 3. Community-based training and resource centres: FTC operates two community-based training and resource centres: the Hackney centre, which opened in September 2006 and the Lambeth centre, which opened in April 2008. The centres work with clients who are either ex-offenders or considered at high risk of offending. Most clients are referred by the prisons service, the probation service, Job Centre Plus and a small number of other organisations including Stonham. The training and resource centres operate on a 'Case Management' model, coordinating referrals and access to services, providing clients with preparation in the form of education, training and mentoring, and supporting clients on an ongoing basis.

The focus of this report is on the economic impact of only the third area – FTC's community-based training and resource centres, and specifically on FTC's

<sup>&</sup>lt;sup>4</sup> The Bridge currently has a completion rate of 80% against a target of 70%, and of those completing the programme, 73% have not reoffended.

Hackney Centre, for three reasons. First, the centres are privately funded, in contrast to the custodial programme and A2C programmes which are funded by public contracts. Second, the centres represent an increasing proportion of FTC's activities as a result of reductions in public funding for custodial programmes during 2010. Third, data on re-offending rates from the Ministry of Justice is available for a sample of 377 FTC clients which interacted at least once with FTC's Hackney centre, allowing an assessment of the re-offending rates of these clients compared to national figures.

### EXHIBIT 1

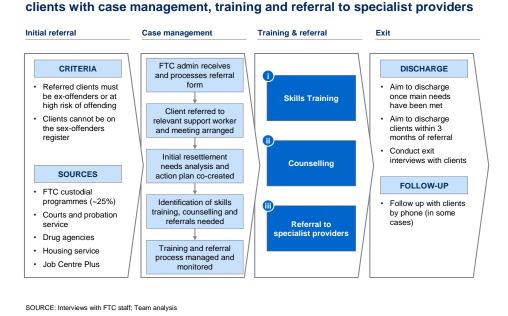


From the creation of the community-based training and resource centre in September 2006, to November 2010 when the data for this study was gathered, FTC had worked with 3,635 clients who had been referred to the centre. A client's interaction with the FTC Hackney centre starts with referral to the centre (Exhibit 2). Four referring agencies account for over 60% of the centre's referrals – FTC Prisons Projects (27% of referrals), London probation Service (17% of referrals), Job Centre Plus (10% of referrals) and HM Prisons (9% of referrals). The remaining referrals come from other smaller agencies and charities (e.g., Stonham, St. Giles Trust) and the number of self-referrals is small (2% referrals). Once referred to the centre, clients are allocated a support worker who conducts a resettlement needs analysis with the client and creates an action plan. The major needs identified with clients are training (22% of referrals), employment (21% of

<sup>&</sup>lt;sup>5</sup> Summary statistics provided by FTC from FTC Hackney Centre client database, November 2010

referrals) and accommodation (14% of referrals)<sup>6</sup>. Once needs have been identified and an action plan agreed, FTC provides counselling, referrals to specialist external providers (e.g., drug treatment centres) and internal skills training designed to help clients achieve the needs identified. FTC aims to discharge clients within 3 months of referral once their main needs have been met and then follow-up with clients on a periodic basis. By November 2010, FTC Hackney had met the training needs of 409 clients, employment needs of 132 clients, accommodation needs of 105 clients, and had success in meeting other needs (including finance, family and health) for 555 clients (creating a positive benefit to over one third of those it has worked with).

### **EXHIBIT 2**



The FTC's two community-based training and resource centres provide

### III. METHODOLOGY AND DATA

In order to estimate the economic impact of FTC's services, we focus on addressing three questions (Exhibit 3):

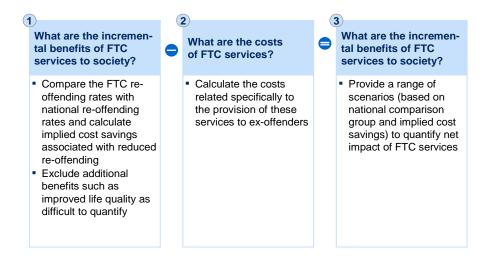
- A. What are the incremental benefits of FTC services to society?
- B. What are the costs of FTC services?

<sup>&</sup>lt;sup>6</sup> Summary statistics provided by FTC from FTC Hackney Centre client database, November 2010

C. (Based on the above 2 questions) What are the net benefits of FTC services to society?

### **EXHIBIT 3**

In order to estimate the economic impact of FTC's services, we focus on addressing three questions



### A. What are the incremental benefits of FTC services to society?

There are two important sub-questions in estimating the incremental benefits of FTC services to society: what will be measured and how will it be measured?

In terms of what to measure, there are three major areas of potential benefits of FTC services to society:

- 1. Avoiding the costs to society associated with re-offending: this includes court costs, cost to businesses, incarceration costs, etc.
- 2. *Increasing the economic activity of ex-prisoners:* giving ex-offenders the opportunity to make a positive economic contribution to society by increasing the probability of employment.
- 3. *Improving broader life quality:* this includes all the non-economic benefits associated with ex-offenders having a better reintegration with society, such as higher self-esteem, stronger relationships with friends and family, less substance abuse, etc.

Whilst all three areas provide potentially valuable benefits to society, unfortunately the latter two categories are particularly hard to quantify with any degree of confidence. As such, we adopt a conservative approach, whereby we focus primarily on the first area - avoiding the costs to society associated with reoffending, whilst also providing a narrow estimate of economic activity impact by including salary differentials only one year after release. The broader quality of life aspects are excluded from the analysis, but interviews with FTC clients suggest that this is nonetheless an important part of the benefit of its services.

Whilst it is definitely possible to measure the avoided costs to society associated with re-offending, it is far from straightforward. As noted by the Home Office Research department, there are a range of methodological challenges to overcome. The first challenge is problems in the outcome measures – reconviction data does not allow for those people who reoffend but do not get caught, nor does it account for changes in the severity and frequency of subsequent reoffending.8 Despite these drawbacks, the lack of a better available outcome measure means that reconviction data is still the preferred measure.<sup>9</sup> The outcome measured used in this work is the percentage of offenders in the cohort offending at least once during the specified period, where the offence resulted in a court conviction. 10 The period chosen for examining re-offending in this study is 1 year due to data availability. Ministry of Justice research has shown that 1 year reconviction rates will capture a large share of reoffending, but there are still likely to be gaps. For example, 43 percent of offenders who were discharged from custody or commenced a court order between January and March 2000 were convicted within 1 year. After 9 years, that number had increased to 74 percent.<sup>11</sup>

The Home Office outlines a 5 point scale (where 1 is the lowest and 5 is the highest in terms of rigour of analysis) to assess the methodological standards of crime prevention research, building on the Scientific Methods Scale originally developed in the US (Sherman et al. 1998):<sup>12</sup>

<sup>&</sup>lt;sup>7</sup> Despite these methodological concerns related to understanding the contribution of programmes to reducing re-offending, the Home Office Research Study 291 acknowledges there is some empirical support for integrated programmes such as FTC's having significant impact on reducing re-offending. One of the most comprehensive reviews of the prison intervention literature concluded that the full range of individual offenders' needs (from personal development to accommodation and dealing with substance abuse) must be addressed if their propensity towards crime is to be successfully reduced (Gaes et al., 1999). These findings were also supported by a later study conducted by Webster et al. (2001).

<sup>&</sup>lt;sup>8</sup> National statistics do include measures of frequency and severity of crimes, but this data does not exist for the FTC sample.

<sup>&</sup>lt;sup>9</sup> For the purposes of the statistics in this report, the re-offence must have been committed within the one-year follow up period, and the conviction must follow either within that one-year follow up, or in a further 6 months, which is to allow time for the offence to be proven at court.

 $<sup>^{10}</sup>$  Ministry of Justice. "National re-offending measures – A guide - An explanation of the headline national re-offending measures" (May 2009).

<sup>11</sup> Ministry of Justice, "Compendium of reoffending statistics and analysis", November 2010.

<sup>&</sup>lt;sup>12</sup> Home Office Research Study 291, "The impact of corrections on re-offending: a review of 'what works", February 2005.

- **Level 1:** A relationship between intervention and reconviction outcome (*with no comparison group*)
- **Level 2:** Expected reconviction rates (or predicted rates) compared to actual reconviction rates for intervention group (*with no comparison group*)
- **Level 3:** Comparison group present without demonstrated comparability to intervention group (*unmatched comparison group*)
- Level 4: Comparison group matched to intervention group on theoretically relevant factors e.g. risk of reconviction (*well-matched comparison group*)
- Level 5: Random assignment of offenders to the intervention and control conditions (*Randomised Control Trial*)

Where it is possible, a randomized control trial (RCT), where offenders are allocated randomly to the treatment group(s) and to one or more control group(s), provides the most reliable results. However in practice, it is difficult to be able to conduct RCTs for a host of ethical and practical reasons. Whilst a RCT may not be feasible, it is crucial to control for potential selection effects which may lead to biased results – for example, everyone who enters a community rehabilitation programme does so on a voluntary basis, and it may be that such people are fundamentally therefore less likely to reoffend than those who do not choose to participate. As such, finding a lower re-offending rate among those who participated in FTC programmes could be attributed to these selection effects, rather than due to the actual impact of the programmes. It is therefore essential to have a counterfactual, i.e. a comparison group that adequately shows what would have happened in the absence of the intervention, to assess what has caused any changes to occur and what these changes have been.

Unfortunately we do not have access to the necessary data to do detailed matching of FTC clients to a relevant comparison group, whose attributes would suggest they have a similar predicted re-offending rate. The approach used here instead is similar to that used by Frontier Economics in its estimation of the economic impact of St Giles Trusts rehabilitation programmes <sup>13</sup> – re-offender statistics are calculated for those in the programme versus national averages (and different cohorts of time in custody – 1-2 years and more than 1 year), and then the attributes of the FTC programme participants are assessed to see if they materially differ from those in the national samples, or other proxies in cases where data is not available within the national samples, on key dimensions likely to influence probability to reoffend. The following attributes are considered:

- 1. Demographics of the FTC clients, specifically gender and age;
- 2. Whether the FTC clients are self-referred;

<sup>13 &</sup>quot;St Giles Trust's Through the Gates: An analysis of economic impact", Frontier Economics, March 2010

- 3. The likelihood of the FTC clients re-offending (High, Medium, Low) as determined by the Probation Service's Offender Assessment System (OASys), which generates a risk assessment based on several inputs provided by an offender's Parole Officer;
- 4. The risk of the FTC clients harming others (High, Medium, Low) as determined by OASys;
- 5. Whether the FTC clients are subject to Multi-Agency Public Protection Arrangements (MAPPA). MAPPA offenders include registered sex offenders (MAPPA category 1), violent offenders under statutory supervision (MAPPA category 2) and other offenders convicted of an offence indicating that they may cause serious harm to the public (category 3);<sup>14</sup> and
- 6. Whether the FTC clients are classified as Prolific and other Priority Offenders (PPO). PPOs must have at least 6 convictions in the last 12 months and on release are supervised by both a parole officer and a police officer<sup>15</sup>.

Clearly there is less rigour to this approach then a more detailed matching of the comparison group to the control group based on several variables indicating propensity to re-offend, however this is the best available option.

One final methodological challenge is trying to distinguish the impact between different programmes. FTC's role – using a case management system - is to help integrate a range of different services that ex-offenders need, some of which they provide directly (e.g., counselling, basic skills training) and others which they refer to specialist organisations. It is difficult to estimate how much of the change in re-offending is due to the role of FTC or these specialist organisations. Distinguishing impact is particularly challenging given there is likely to be significant problems with selection bias – for example, people who use just a limited range of services may be less likely to reoffend than those using a broader array of services. In addition, the re-conviction data provided to FTC by the Ministry of Justice is only provided on a group basis, meaning that it is impossible to distinguish between different individuals and the services they use. As an alternative, the team conducted interviews with a random selection of ex-offenders who use FTC's services to understand the role of FTC vis-à-vis these other service providers. Whilst this qualitative information is not economically robust, it can at least provide us with an indication of the role of FTC in explaining the aggregate reconviction rates.

In terms of sample size, the Home Office recommends a minimum sample of 400 people, depending on the required confidence intervals, in order to have valid

<sup>&</sup>lt;sup>14</sup> MAPPA, London Annual Report, 2009/10

<sup>15</sup> Northumbria Probation Trust, <a href="http://www.northumbria-probation.co.uk/working/ppo.html">http://www.northumbria-probation.co.uk/working/ppo.html</a>, Last accessed March 2011

results.<sup>16</sup> The sample size used in this study is slightly smaller than this for FTC due to inability to obtain larger sample sizes from the Ministry of Justice. A total of 377 people are in the FTC sample, representing FTC clients from January 2007 to December 2008, who had at least one interaction with FTC Hackney and at least one referral made.<sup>17</sup>

All of the caveats noted above suggest that the estimates produced should be treated with some caution.

We also interviewed a random selection of ten ex-prisoners who used FTC's services in order to test for consistency of their experiences with those determined by the economic analysis – the results of which are discussed later.

Finally, in order to estimate the size of the avoided cost from reducing reoffending, the same approach as used by Frontier Economics for the St Giles Trust is employed here. <sup>18</sup> Frontier Economics used a two-pronged approach to estimating these cost savings:

- "Bottom up": This method cumulates the hypothetical costs to society due to an offender re-offending. These costs include direct criminal justice costs (criminal justice costs, custodial sentencing costs and prison costs) and non-direct criminal justice cost. It includes a limited assessment of potential economic benefits by assessing the income differentials of re-offenders one year after release. It excludes costs to the offender and the offenders family (lost earnings), and costs to the victims and the community due to difficulties in quantifying these costs.<sup>19</sup> This results in an estimated minimum average cost of £83,524 per re-offender per year (Exhibit 4).<sup>20</sup>
- "Top down": Alternatively the cost of an individual re-offender can be deduced systematically from the recorded total cost of crime. The most recent estimate of the total cost to society of re-offending is £13.19bn per year in 2010 prices. This implies that the cost per re-offender is about £167,642 in 2010 prices (Exhibit 5).

<sup>&</sup>lt;sup>16</sup> Home Office Research Study 291, "The impact of corrections on re-offending: a review of 'what works", February 2005.

A total sample of 425 people met these criteria, but unfortunately data could not be obtained for 48 people from the Ministry of Justice database due to the following reasons: no matched offender information in the Police National Computer (PNC) database; duplicated matches; or substantial differences in names and date of birth between provided dataset and records on PNC.

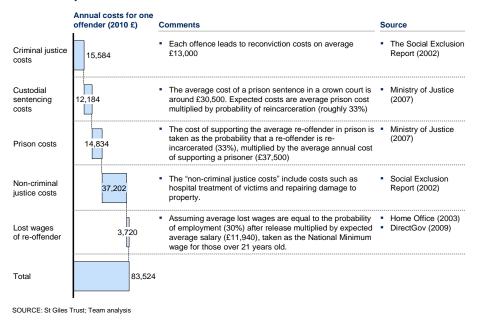
<sup>18 &</sup>quot;St Giles Trust's Through the Gates: An analysis of economic impact", Frontier Economics, March 2010.

<sup>19</sup> These costs could be substantial however. For example, a Home Office paper in 2000 estimated that the cost to the victims of crime make up over 50% of the total cost of crime, and have been estimated at £18 billion per year.

<sup>20</sup> Estimates differ slightly from those in the St Giles Trust case study as estimates shown here are in 2010 prices (rather than 2009 prices)

### **EXHIBIT 4**

### "Bottom up" cost estimates



### **EXHIBIT 5**

### Savings to society were calculated "top down" and "bottom up"

### "Top down"

Deduced systematically from the recorded total cost of crime. The most recent estimate of the total cost to society of re-offending is £13.19 bn per year in 2010 prices. This implies that the cost per re-offender is about £167,642 in 2010 prices

£83-168,000 per year

### "Bottom up"

These costs include direct criminal justice costs (criminal justice costs, custodial sentencing costs and prison costs) and non-direct criminal justice cost. It excludes costs to the offender and the offenders family (lost earnings), and costs to the victims and the community due to difficulties in quantifying these costs. This results in an estimated minimum average cost of £83,524 per re-offender per year in 2010 prices

SOURCE: St Giles Trust; Team analysis

### B. What are the costs of FTC services?

As mentioned previously, FTC runs a number of services and for this report we are focusing on only one portion of their programs: the Hackney Resource Centre. FTC's annual accounts were the basis for our cost estimates in this analysis. Due to the inability of the team to access the data, costs related to services provided by third party organisations are not included.<sup>21</sup>

This analysis examines the accounts released for the last two financial years, thus covering the period since both resource centres were operational. Due to FTC's financial year moving during this time, the data covers a period of 26 months. FTC's overall cost base is driven by employee and rental costs, accounting for over three quarters of total costs (Exhibit 6).

The majority of the Hackney Centre's costs can be directly and completely attributed to it. However, some of FTC's costs are spent centrally and benefit numerous programs. For this analysis, the majority of these costs were shared among FTC's various programs in shares proportional to their relative expenditure. However, one line item, on consultancy spend, was judged to have primarily benefitted just the two resource centres. This cost was thus split equally between the two resource centre accounts for our purposes.

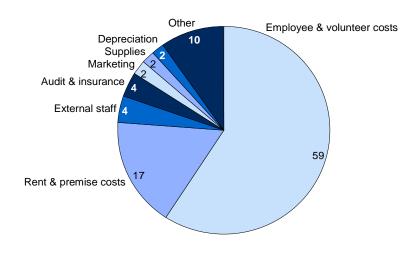
For the majority of line items, costs were simply averaged and annualised. Three items, detailing the initial refurbishment of the centre and the installation of IT systems, have been treated as capital investments, to be depreciated on a straight-line basis over ten years.

<sup>&</sup>lt;sup>21</sup> This refers to specialist agencies (e.g., drug rehabilitation programmes) which FTC may direct reoffenders to.

### **EXHIBIT 6**

### **FTC** cost structure

Share of total; April 2008 to May 2010



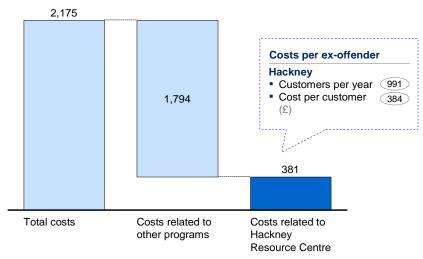
SOURCE: FTC financial statements

Overall, the Hackney Resource Centre's total annual costs are £380,720 a year, serving an average of 991 clients annually. This corresponds to an average cost per client of roughly £384 (Exhibit 7).

### **EXHIBIT 7**

### **FTC** cost structure

Total costs FTC; April 2008 to May 2010, annualised £, 000s



SOURCE: FTC financial statements; Team analysis

### C. What are the net benefits of FTC services to society?

The net benefits to society are based on a range of scenarios, in order to give ranges of estimates (given the variability in some of the data). The scenarios are based on different estimates of potential benefits and costs:

- Rate of re-offending: comparing FTC reoffending rates with different national cohort averages (2007-08)
- Costs of re-offending: using range of estimates based on top-down and bottom-estimates discussed above

Exhibit 8 below provides a summary of the methodology used in this paper.

### **EXHIBIT 8**

### Summary of approach

	Description			
Type of benefits considered	<ul> <li>Avoiding the costs to society associated with re-offending and narrow assessment of economic benefits (1 year employment rate differentials)</li> <li>No consideration of broader social benefits (e.g., higher self-esteem)</li> </ul>			
Outcome measure	<ul> <li>The percentage of offenders in the cohort offending at least once during the year after release, where the offence resulted in a court conviction</li> <li>Comparison to 2 national cohorts – (1) Greater than 1 year in custody; and (2) 1 2 years in custody</li> </ul>			
Sample size	<ul> <li>A total of 377 people are in the FTC sample, representing FTC clients from January 2007 to December 2008, who had at least one interaction with FTC Hackney and at least one referral made</li> </ul>			
Controlling for selection bias	<ul> <li>Comparison of FTC cohort to national sample of offenders in terms of attribution with predictive power of likelihood of re-offending – gender; age; percent selfortered; percent subject to MAPPA; OASys score; and percent classified as Prolific and other Priority Offenders (PPO)</li> </ul>			
Size of benefits	■ Use estimates from Frontier Economics study of St Giles Trust, which used "bottom up" and "top down" estimates of cost of re-offending			
Costs	<ul> <li>Annualized cost of running FTC Hackney centre</li> <li>No consideration of costs of referred services</li> </ul>			

### IV. MAIN RESULTS

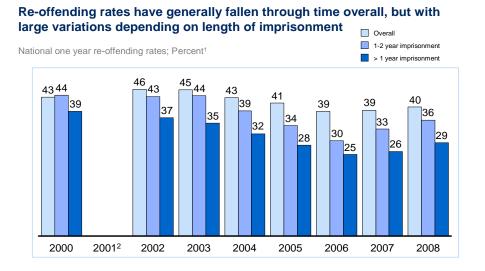
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### A. Comparison of re-offending rates

Since 2000, the proportion of offenders in the national cohort who reoffended decreased by 6.8 per cent (2.9 percentage points) from 43.0 per cent to 40.1 per cent; however since 2007 this has increased by 2.9 per cent (1.1 percentage points) from 39.0 per cent to 40.1 per cent (Exhibit 9).

There are large variations in re-offending depending on offender characteristics however. For example, for those who have served more than 1 year imprisonment, the average re-offending rate was just 29 percent in 2008, whereas the overall reoffending rate was 40 percent (Exhibit 9). This reinforces the need to have careful matching of offender characteristics between the national statistics and the FTC data to ensure meaningful results, which unfortunately is difficult in this instance due to the lack of offender specific data in the FTC sample and a representative matching group at the national level.

### **EXHIBIT 9**



1 The Reoffending of adults in England and Wales National Statistics publication measures the percentage of adults who are discharged from custody or start a court order under probation supervision between January and March and who are reconvicted at court within one year 2 Data is not available for 2001 due to a problem with archived data on court orders.

SOURCE: Ministry of Justice, "Reoffending of adults: results from the 2008 cohort (England and Wales)", 18 March 2010; Team analysis

Despite the methodological challenges described above, when comparing the FTC reoffending rates to the national average, the FTC sample of ex-offenders have significantly lower re-offending rates (Exhibit 10). FTC clients have generally served a minimum sentence of a year, however we do not know the average length of time that all FTC clients included in the sample were in custody.<sup>22</sup> As a result, we compare the FTC cohort with the national data on re-offending on ex-prisoners in custody for those:<sup>23</sup>

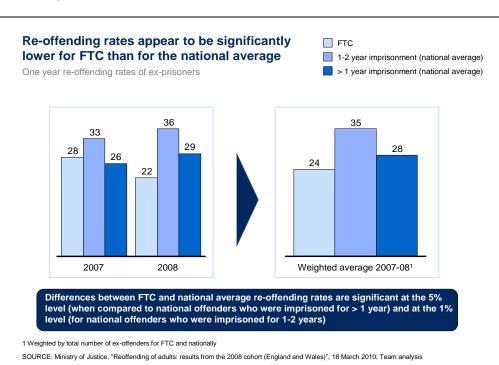
22 Data on length of imprisonment is available for only 185 of the 377 people in the FTC sample. For those people, 16% served less than 12 months; 13% served 1-2 years, 25% served 2-4 years and 46% served 4 years plus. The average length of imprisonment is higher than the national average – from 2007-08, 63% served less than 12 months, 14% served 1-2 years, 14% served 2-4 years, and 8% served more than 4 years.

23 This approach is consistent with the approach used in "St Giles Trust's Through the Gates: An analysis of economic impact", Frontier Economics, March 2010. Re-offending rates generally decline with length of time spent in custody. For example, whilst the average re-offending rate is 40% from 2007-08, the average re-offending rate for those spending less than 12 months in custody is 61% and for those spending more

- 1. Imprisoned between 1 and 2 years
- 2. Imprisoned greater than a year

The average re-offending rate of FTC clients was approximately 24 percent in 2007-08, whereas at the national level the figure was roughly 35 percent for those ex-offenders who have been in custody for 1-2 years, and 28 percent for ex-offenders who had been in custody for more than 1 year. Differences between FTC and national average re-offending rates are significant at the 5% level (when compared to national offenders who were in custody for greater than 1 year) and at the 1% level (for national offenders who were in custody for 1-2 years), based on a one-sided test.<sup>24</sup>

### EXHIBIT 10



than 4 years in custody it is 18%. The approach taken has attempted to be conservative by not comparing FTC re-offending rates to the overall average (40%), but rather proxies which have lower re-offending rates -1-2 years in custody (35%) and greater than 1 year (28%).

<sup>24</sup> Corresponds to t statistics of 1.78 and 4.98 respectively. In statistical significance testing, the p-value is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true (i.e., that there is no statistically significant difference between the national re-offending rates and those of FTC clients). One often "rejects the null hypothesis" when the p-value is less than 0.05 or 0.01, corresponding respectively to a 5% or 1% chance of rejecting the null hypothesis when it is true (Type I error). When the null hypothesis is rejected, the result is said to be statistically significant.

### **B.** Analyzing potential biases

As discussed previously, due the limitations of the available data, we do not have access to the necessary data to do detailed matching of FTC clients to a relevant comparison group, whose attributes would suggest they have a similar predicted re-offending rate.

The approach used here instead is to assess the attributes of the FTC programme participants to see if they materially differ from those in the national sample, or other proxies in cases where data is not available within the national sample, on key dimensions likely to influence probability to reoffend.

Our conclusion is that while there are differences between FTC's clients and data from the national samples or available proxies, these differences are unlikely to be able to provide an alternative explanation of FTC's significantly lower re-offending rates given the available data.

### EXHIBIT 11

TC clients otential sources of selection bias				Highly correlated to re-offending rates  Not correlated to re-offending rates			
mographics	% Male		96.3%	N/A	87.1%		
mographics	% aged 18 - 20		9.3%	N/A	16.5%		
ferral source	% self-referred		0.3%	N/A	N/A		
elihood of re-offending	'High' or 'Medium' (OAsys)		26.8%	N/A	N/A		
sk to others	'High' or 'Medium' (OAsys)		22.6%	N/A	N/A		
lice classification	% subject to MAPPA arrangements		0.8%	14%	N/A		
ice classification	% listed as Prolific and other priority offenders	•	6.6%	N/A	N/A		

### 1. Demographics of the FTC clients

### Gender

We conclude that a selection bias on gender cannot explain the lower re-offending rates of FTC clients. A greater proportion of FTC's clients were male than in the national sample, and men are more likely to re-offend than women in the national sample.

- In the FTC sample of 377 clients, 363 (96.3%) were male and 14 (3.7%) were female. In the national data, of the 103,803 people in the 2007 and 2008 cohorts, 90,459 (87.1%) were male and 13,344 (12.9%) were female.
- The national data shows than men were more likely to re-offend than women in 2007 and 2008 (and indeed in every year reported since 2000). In 2007, 39.8% of men reoffended, compared to 33.1% of women. In 2008, 40.8% of men reoffended, compared to 35.6% of women.

### Age

We conclude that FTC clients do exhibit different age characteristics to the national sample. FTC has fewer clients in younger age groups, who are statistically more likely to re-offend, and more clients in older age groups, who are statistically less likely to re-offend (Table 1):

- In the FTC sample of 377 clients, only 9.3% of clients were in the 18-20 age category at date of referral, compared to 16.5% of offenders at date of release in the national sample. Individuals in the 18-20 age category are significantly more likely to re-offend than the national average.
- In the FTC sample, 21.2% of clients were in the 40-49 age category at date of referral, compared to 14.5% of offenders at date of release in the national sample. Individuals in the 40-49 age category are significantly less likely to re-offend than the national average.

TABLE 1

Age Group	% of FTC Sample	% of National Sample	FTC Variance to National Sample	National sample Re-offending rate 2007	National sample Re-offending rate 2008
Age: 18 – 20	9.3%	16.5%	-7.2%	48.3%	47.2%
Age: 21 – 24	17.0%	18.8%	-1.8%	41.3%	43.0%
Age: 25 – 29	19.4%	18.7%	0.6%	42.4%	43.8%
Age: 30 – 34	14.6%	14.1%	0.4%	41.3%	41.9%
Age: 35 – 39	13.3%	12.2%	1.1%	35.8%	38.2%
Age: 40 – 49	21.2%	14.5%	6.7%	28.4%	31.2%
Age: 50+	5.3%	5.2%	0.2%	19.0%	18.5%

Given the re-offending data for FTC provided by the Ministry of Justice does not include individual-specific data (i.e., it only shows re-offending rates for the overall FTC sample), it is unclear whether age differences alone would be sufficient to explain the lower re-offending rates of FTC clients. Furthermore, average FTC reoffending rates are lower than the rates for all age cohorts in the

national data, with the exception of the 60+ age group (and this age group represents only about 5% of the FTC and national samples).<sup>25</sup>

### 2. Whether the FTC clients are self-referred

We conclude that a selection bias on type of offender (measured by self-referral where self-referred clients are less likely to re-offend) cannot explain the lower re-offending rates of FTC clients.<sup>26</sup>

• In the FTC sample only 1 of the 377 clients (0.3%) were self-referred. This would be insufficient to explain a statistically significant difference in re-offending rates of the sample as the result of a selection bias on self-referral.

# 3. The likelihood of the FTC clients re-offending (High, Medium, Low) as determined by the Probation Service's Offender Assessment System (OASys)

There was insufficient data to assess whether a selection bias (measured by clients with a 'High' or 'Medium' likelihood of re-offending) could explain the lower re-offending rates of FTC clients.

- In the FTC sample, a total of 101 clients (26.8%) were classified as being of 'high' (29 clients, 7.7%) or 'medium' (72 clients, 19.1%) risk of reoffending.
- We were unable to identify a suitable proxy for the 2007 and 2008 cohorts to determine whether 26.8% of a sample was a qualitatively significant proportion of offenders at 'high' or 'medium' risk of reoffending or whether this could explain the statistically significant difference in re-offending rates.
- FTCs proportion of clients at 'high' or 'medium' risk of re-offending is lower than that of the sample studied by Frontier Economics in 2009 for the St. Giles Trust (66.4%).
- In the FTC sample, 152 clients (40.3%) had no OASys classification reported. This reflects both low levels of OASys completion and the loss of data when referral agencies do not fully complete FTCs referral

<sup>&</sup>lt;sup>25</sup> Adjusting the national re-offending statistics for the age distribution of FTC clients has little impact, with the national reoffending rate falling from 40% to 38%. In comparison, the current proxies used for the national cohort have reoffending rates which are significantly lower - 28% (more than 1 year in custody) and 35% (1-2 years in custody).

<sup>&</sup>lt;sup>26</sup> There may still be a selection bias however with FTC clients as their willingness to use FTC services may indicate a lower likelihood of reoffending. Unfortunately it is not possible to capture this potential bias with the available data.

forms.<sup>27</sup> We therefore cannot rule out the hypothesis that form completion rigour may explain some of the different between the FTC, St. Giles and national samples.

# 4. The risk of the FTC clients harming others (High, Medium, Low) as determined by OASys

There was insufficient data to assess whether a selection bias (measured by clients with a 'High' or 'Medium' likelihood of harming others where such clients are more likely to re-offend) could explain the lower re-offending rates of FTC clients.

- In the FTC sample, a total of 85 clients (22.6%) were classified as being of 'high' (10 clients, 2.7%) or 'medium' (75 clients, 19.9%) risk of harming others.
- We were unable to identify a suitable proxy for the 2007 and 2008 cohorts to determine whether 22.6% of a sample was a qualitatively significant proportion of offenders at 'high' or 'medium' risk harming others or whether this could explain the statistically significant difference in re-offending rates.
- In the FTC sample, 145 clients (38.5%) had no OASys classification reported. This reflects both low levels of OASys completion and the loss of data when referral agencies do not fully complete FTCs referral forms.

# 5. Whether the FTC clients are subject to Multi-Agency Public Protection Arrangements (MAPPA)<sup>28</sup>

There was insufficient data to assess whether a selection bias (measured by clients subject to MAPPA arrangements where such clients are more likely to re-offend) could explain the lower re-offending rates of FTC clients.

- In the FTC sample, only 3 clients (0.8%) of the 377 were subject to MAPPA arrangements. However, the national sample does not identify offenders subject to MAPPA arrangements or detail the proportion of offenders subject to MAPPA arrangements.
- We were unable to identify a suitable proxy for the 2007 and 2008 cohorts to determine whether 0.8% of a sample was a qualitatively 'low' or 'high' proportion of offenders subject to MAPPA arrangements, or

<sup>&</sup>lt;sup>27</sup> Those serving less than 12 months in prison do not have an OAsys completed. Of the 185 people in the FTC sample of 377 where data on the length of imprisonment is available, 16 percent served less than 12 months.

<sup>28</sup> MAPPA, London Annual Report, 2009/10

whether this could explain the statistically significant difference in reoffending rates.

- FTCs proportion of clients subject to MAPPA arrangements is lower than that of the sample studied by Frontier Economics in 2009 for the St. Giles Trust (14%), but in and of itself this is insufficient to assess selection bias.
- In and of itself, MAPPA classification is unlikely to be a good proxy for likelihood to re-offend as offenders imprisoned for sexual or serious violence offences are around half as likely to re-offend as the cohort average for the 2008 cohort.

# 6. Whether the FTC clients are classified as Prolific and other Priority Offenders (PPO).

There was insufficient data to assess whether a selection bias (measured by clients classified as PPOs where such clients are more likely to re-offend) could explain the lower re-offending rates of FTC clients.

- In the FTC sample, 25 clients (6.6%) of the 377 were classified as PPOs. However, the national sample does not identify offenders classified as PPOs or detail the proportion of offenders classified as PPOs.
- We were unable to identify suitable proxies for the national sample which indicated the proportion of the general prison population or the 2008 cohort who were classified as PPOs.

# 7. Understanding the role of FTC versus specialist agencies in reducing reoffending.

For the overall sample of 377 FTC clients, the FTC database shows that 374 clients (99.2% of the sample) received counselling from FTC, 228 clients (60.4% of the sample) received skills training with FTC (60.4%), and 189 of these clients (50.5% of the sample) were assigned to other agencies for further support.<sup>29</sup> Therefore, for roughly half of the sample, there may have been some influence of external agencies that accounts for the lower reoffending rates. Distinguishing the impact of FTC services versus the role of specialist services it refers ex-offenders to is difficult using standard economic techniques as the Ministry of Justice did not

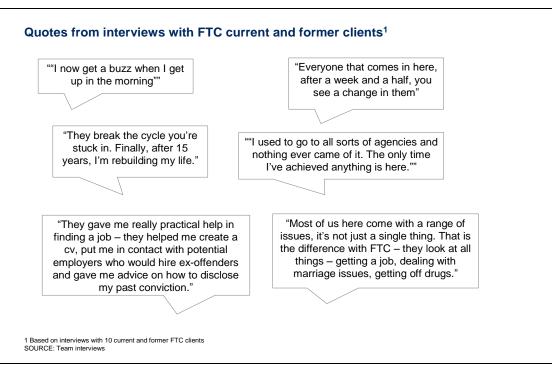
Roughly 70% of FTC clients in the sample had 5 or less interactions with FTC, with 15% having more than 10 interactions. This suggests that there is some variability in the number of interactions, which could explain some of the reoffending rate differences. Unfortunately the Ministry of Justice did not provide individual reoffending data to understand the impact this could have on the overall reoffending results.

provide individual reoffending data (making it impossible to relate the reoffending rates to the number and type of interactions that clients had).

As such, the team conducted ten interviews with current and former FTC clients in March 2010 to get a better understanding of the role that FTC plays. Some of the main insights from these discussions included (Exhibit 12):

- The role of FTC versus other specialist providers: many interviewees mentioned that the real benefit of FTC was that they consider all the needs of ex-offenders, rather than just one aspect (e.g., getting a job, dealing with substance abuse). In this way, they considered the services that FTC offer to be distinctly valuable from other specialist organisations that deal with specific needs.
- *Improving broader life quality:* many of the interviewees mentioned the non-economic benefits they had received from FTC, including higher self-esteem, stronger relationships with friends and family, and less substance abuse. As these benefits are difficult to quantify, they were excluded from the analysis in this paper, but nonetheless they appear to be an important benefit of FTC's services.

### EXHIBIT 12



### C. Calculating net impact

Given the significant variations in some of the key inputs, notably the average reduction in re-offending rates depending on national comparison group used, and

the costs to society from re-offending, we use a scenario approach to understand the net impact of FTC under different combinations of these two input categories.

Scenarios for reductions in re-offending:

- Compared to cohort spending 1-2 years in custody: average re-offending rates for those spending 1-2 years in custody in 2007-08 was 34.6%, which is 10.9 p.p. higher than the FTC average
- Compared to cohort spending more than 1 year in custody: average reoffending rates for those spending more than 1 year in custody in 2007-08 was 27.5%, which is 3.9 p.p. higher than the FTC average

Scenarios for cost savings from reduction of re-offending:

- \*\*Bottom up": This method cumulates the hypothetical costs to society due to an offender re-offending. These costs include direct criminal justice costs (criminal justice costs, custodial sentencing costs and prison costs) and non-direct criminal justice cost. It excludes costs to the offender and the offenders family (lost earnings), and costs to the victims and the community due to difficulties in quantifying these costs. This results in an estimated minimum average cost of £83,524 per re-offender per year).
- "Top down": Alternatively the cost of an individual re-offender can be deduced systematically from the recorded total cost of crime. The most recent estimate of the total cost to society of re-offending is £13.19bn per year in 2010 prices. This implies that the cost per re-offender is about £167,642 in 2010 prices.

Based on these different scenarios, the net benefit is calculated by dividing these total benefits by the cost of serving each FTC client (£384). As shown in Exhibit 13, this provides a large range, with every pound spent by FTC on its Hackney centre resulting in anywhere from £8-48 in net benefits to society. In terms of cost savings per client, the range is anywhere from £2,900 to £17,900.<sup>32</sup> Adopting a conservative approach and comparing FTC clients against a national cohort spending more than 1 year in custody produces net benefits of £8-17 for every pound spent, and savings per client of £2,900 to £6,100.

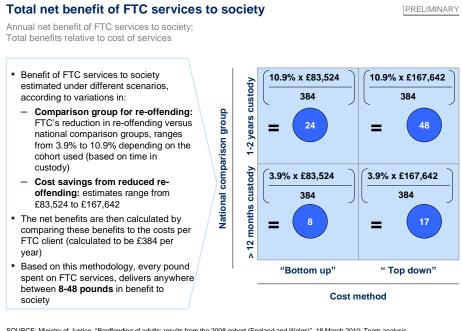
<sup>30</sup> These costs could be substantial however. For example, a Home Office paper in 2000 estimated that the cost to the victims of crime make up over 50% of the total cost of crime, and have been estimated at £18 billion per year.

<sup>31</sup> Estimates differ slightly from those in the St Giles Trust case study as estimates shown here are in 2010 prices (rather than 2009 prices)

<sup>32</sup> This is a similar figure to that found for St Giles, which was estimated to produce a cost saving per individual of £8,616 to £28,722 (and a benefit-cost of 10:1, at a minimum). Note that given the potential error range involved in these estimates, these differences should not be considered statistically significant.

As noted above, these net benefits are calculated on the assumption that the total reduction in the re-offending rate is due to FTC's interventions alone, as we are unable to calculate the impact of other services, to which FTC clients may be referred.

### EXHIBIT 13



SOURCE: Ministry of Justice, "Reoffending of adults: results from the 2008 cohort (England and Wales)", 18 March 2010; Team analysis

### V. CONCLUSIONS AND NEXT STEPS

Whilst there are significant methodological challenges in obtaining robust estimates of the net societal impact of FTC's Hackney centre, the available evidence suggests that the benefits could be significant – every pound spent on the centre potentially delivering benefits to society of £8 to £17.

There are some key areas where this research needs to be extended:

- Establishing reliable comparison groups: more work needs to be done to ensure there is a comparison group of ex-offenders at the national level matched to the intervention group within FTC according to theoretically relevant factors for the risk of reconviction.
- Extending data to include longer time periods to measure reconvictions: one-year reconviction data was used in this study due to data limitations. Whilst past Ministry of Justice research has demonstrated that a large share of ex-offenders who do re-offend do so within their first year of release, there is still likely to be a large share of future convictions not captured in

- this one-year time period. Extending the data coverage to two or more years would be useful for obtaining more robust results.
- Distinguishing the role of FTC versus other service providers: it was impossible in this analysis to distinguish the impact of FTC versus the other providers to which it refers ex-offenders. Whilst there are significant selection bias issues to address, data on reconviction rates for specific (anonymous) individuals would enable analysis to compare the range of services received by the individual and their reconviction rates.
- Capturing the broader benefits of reduced reoffending: this study only provided a narrow assessment of the potential benefits from reduced reoffending, primarily focused on the avoided costs to society associated with re-offending (including court costs, cost to businesses, incarceration costs, etc). More research is needed into the broader benefits of reduced reoffending, including economic impact and quality of life concerns.

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