

# The value created by social outcomes contracts in the UK

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# **Contents**

Introduction and acknowledgements					
1.	Executive Summary	1			
2.	Background and approach	4			
2.1	Introduction	4			
2.2	Approach	4			
2.3	Presentation of findings	8			
3.	Findings	13			
3.1	Introduction	13			
3.2	Findings – Child and family welfare sector	13			
3.3	Findings – Education sector	15			
3.4	Findings – Employment and training sector	17			
3.5	Findings – Health Sector	19			
3.6	Findings – Homelessness Sector	21			
3.7	Findings – Criminal justice/other sector	23			
Арр	pendices	25			
App	pendix A – Glossary of terms	26			
App	pendix B – Cost and value data	29			
App	pendix C – Adherence to Green Book principles	35			
App	pendix D – Main assumptions: Child and family welfare	38			
App	pendix E – Main assumptions: Education	46			
App	Appendix F – Main assumptions: Employment and training 50				
App	Appendix G – Main assumptions: Health 53				
App	Appendix H – Main assumptions: Homelessness 57				
App	pendix I – Main assumptions: Criminal justice	62			



# Introduction and acknowledgements

This report was produced by ATQ consultants (ATQ) for Big Society Capital and provides an assessment of the total value so far created in the UK by social outcomes contracts.

ATQ supports the achievement, measurement and evaluation of social impact, by:

- managing, monitoring and evaluating projects and programmes which achieve social impact;
- supporting social sector organisations to measure and improve their social impact; and
- helping commissioners and providers develop and implement outcomes-based contracts that deliver social impact.

The subject of this report – the public value created by social outcomes contracts – has been an important part of our work since ATQ was founded in 2012. We are therefore delighted to have had the opportunity to provide what we believe is the first attempt to put a value on such contracts in the UK as a whole.

We would like to thank both Big Society Capital and various stakeholders within the social outcomes sector — in particular intermediaries and Investment Fund Managers — who provided invaluable support to this project, by supplying and clarifying the data without which we would not have been able to complete it.

The findings set out in this report and the interpretation of data behind them are entirely the responsibility of ATQ.



# 1. Executive Summary

This report provides an assessment of the total public value so far created by Social Outcomes Contracts in the UK. The analysis was carried out by ATQ and commissioned by Big Society Capital.

Our analysis is based on actual outcomes achieved by projects to date (early 2022) since the first SOCs were implemented 10 years ago. It covers a total of 76 contracts ranging from small experimental projects to major contracts addressing the needs of thousands of people. It excludes a number of past or current contracts because of challenges in obtaining data, or because contracts are too early stage to have results to which we could assign value.

We collected data on these projects from intermediaries and Investment Fund Managers (IFMs) who manage projects, supplemented by data from published evaluations of some programmes and projects. We then modelled this data to estimate the potential public value they have created, based on calculations of the value these contracts have already delivered (by preventing or reducing adverse outcomes) and assumptions about the future value they will create as further adverse outcomes are avoided or positive outcomes achieved. We explain our approach in detail in section 2 of this report.

We believe that our analysis is likely to underestimate value because we have deliberately made cautious assumptions of future value and used low cost estimates in order to guard against optimism bias, as we explain further in section 2.3.5 of this report.

This means that we are confident that this cost value case is robust and provides a reasonable estimate of the value created by SOCs in the UK to date.

# **Overall summary of findings**

We had full data (both outcomes achieved and the cost of those outcomes to commissioners) for 72 SOCs. In summary we find that:

The total present value created by these 72 SOCs is: £1.418 billion

The cost of these outcomes to commissioners was: £139 million

The net present social value (NPSV) of these SOCs is: £1.279 billion

The benefit cost ratio (BCR) of these SOCs is: 10.2

For the other four SOCs we know what outcomes were achieved but not what the cost of those outcomes was to commissioners. We estimate that these four SOCs created a further £41 million of value. Thus the total value created by all 76 projects is £1.459 billion.



This total value of £1.459 billion breaks down into value categories as follows – see section 2 for fuller definitions of these categories<sup>1</sup>.

Total fiscal value: (Direct savings to or costs avoided by the public sector)	£406 m
Total social value: (Wider gains to society)	£323 m
Total economic value: (Economic gains from increased earnings)	£729 m

We have also assigned a confidence rating to all our estimates of value based on the extent to which value is certain or very likely to occur. Section 2 proves full details of our confidence ratings but in summary we have high confidence in value which is measured directly by the relevant outcomes contract (referred to in this report as direct outcomes) such as local authority care avoided, employment for a specified period, or qualifications achieved. We have medium or low confidence (depending on the quality of evidence available) in the value of outcomes that may occur later as a consequence of those direct outcomes, such as improved wellbeing or reduced offending.

Of the total value of £1.459 billion we have:

High confidence in value worth:	£811 m
Medium confidence in value worth:	£516 m
Low confidence in value worth:	£132 m

# Breakdown of value by policy sector

Throughout this report we have presented our findings by the six policy sectors that are used to classify SOCs in the 'INDIGO' Impact Bond dataset<sup>2</sup> maintained by the Government Outcomes Lab (GO Lab). The breakdown by these sectors is shown in Table 1 below. We caution against drawing conclusions from the varying value by sector which reflects the number and size of contracts, and numerous other factors, and does not imply any view of relative sector performance or suitability of the sector for SOCs.

We present sector by sector findings in more detail in section 3 of this report, and provide further background and explanation of various aspects of our approach and assumptions in Appendices A – I.

<sup>1</sup> Note that figures broken down into categories and confidence levels may not equal total figures due to rounding

 $<sup>^2 \ \</sup> See \ https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/impact-bond-dataset-v2/$ 



INDIGO sector	Number of SOCs	Total present value	Cost to commiss-ioners	Net present value	Benefit cost ratio
Child and family welfare	18	£388.8 m	£35.6 m	£353.2 m	10.92
Education	6	£41.2 m	£6.8 m	£34.5 m	6.09
Employment and training	17	£599.6 m	£33.9 m	£565.7 m	17.70
Health	11	£177.9 m	£20.7 m	£157.2 m	8.59
Homelessness	20	£210.5 m	£41.8 m	£168.7 m	5.04
Criminal Justice / other (Projects with no cost data)	4	£40.9 m	N/A	N/A	N/A

Table 1 – Breakdown by INDIGO Sector



# 2. Background and approach

#### 2.1 Introduction

This report is the outcome of work by ATQ Consultants (ATQ) to estimate the public value created by Social Outcomes Contracts (SOCs) in the UK. It was commissioned by Big Society Capital and completed between January and May 2022.

SOCs (sometimes also called Social Impact Bonds or SIBs, or simply Impact Bonds) are a type of contract for the delivery of services or interventions that aims to improve outcomes for people who are vulnerable or have complex needs. They take a wide variety of forms and are different to other types of contract in having as a minimum, two key features: some or all of the payment for services is linked to the achievement of specified outcomes (also known as a Payment by Results model); and the contracts are supported in a variety of ways by social investment. Please see Appendix A for a glossary of these and other technical terms used in this report.

This section of our report explains how we approached the project and how we have reported our findings. Section 3 then describes our findings broken down by policy sector, with further details of our sources and assumptions in Appendices B and D-I.

# 2.2 Approach

#### 2.2.1 Overview

The approach we took to this project follows a methodology that we have historically applied across more than 30 projects in order to estimate the value that a SOC has created, or is likely to create if implemented. We have undertaken such projects for a wide range of organisations including central government departments, local authorities, health sector commissioners, Investment Fund Managers, and social sector service providers.

The premise behind a value case is that the intervention or service provided through the contract will either avoid or reduce the severity of an adverse outcome (for example it will provide family therapy that enables a child at risk of entering local authority care to avoid doing so); or it will create a positive outcome (for example it will provide coaching and support that will enable someone to gain a qualification or enter employment). In both cases the contract will create financial value either by reducing the cost of an adverse outcome (such as the cost of care by a local authority) or generating the value of a positive outcome (such as the economic value of someone being in work and paying taxes).

This project is unlike the majority of value cases we have undertaken for SOCs because:

- It aims to aggregate the value created across numerous contracts most value cases are undertaken only for one contract.
- It is based on the results achieved by contracts to date, rather than estimating the impact of
  future contracts. Most value analysis is undertaken 'ex ante' during the development of an SOC
  and often to support the financial case for its implementation, although some are based 'ex post'
  on actual results achieved.

The fact that this value case is based on actual outcomes achieved to date is important and means that a key area of uncertainty in creating a value case – predicting the impact of the intervention – is



not a factor. This means that we can estimate value with much greater certainty. Even when outcomes are known, however, estimating value is not an exact science, because as we explain further below, it depends in many cases on estimating what we have termed 'consequential' outcomes that are harder to predict. For that reason, we have deliberately made cautious assumptions to ensure that we do not over-estimate value, as we explain further in section 2.3.5 below.

The rest of this section explains in more detail how we have completed our analysis.

## 2.2.2 Projects included in our analysis

The most reliable and complete source of how many SOCs have been implemented in the UK is the INDIGO Impact Bond dataset<sup>3</sup> compiled and managed by the Government Outcomes Lab (GO Lab) which contains 88 projects. Our analysis covers a total of 76 projects, including two that are not recorded in INDIGO and excluding a few that are. The main reasons for excluding projects were challenges in obtaining data (see 2.2.3 below) and projects being at too early stage to have generated outcomes from which we could estimate value. In summary our analysis included and excluded projects as follows:

SOCs listed in INDIGO database	88
PLUS	
SOCs not listed in INDIGO and confirmed to be SOCs	2
LESS	
Projects for which we could not obtain data	8
Projects too early stage to generate outcomes	4
Project in INDIGO but not a SOC according to intermediary	1
Project in INDIGO but part of another project	1
Net projects included in our analysis	76

Although we refer in this report to SOCs in the UK we note that all the projects included in our analysis are in England. We have identified only two SOCs outside England (both funded by the Department for Work and Pensions (DWP) Innovation Fund) and neither is included in our analysis for reasons explained below.

#### 2.2.3 Sources for outcomes data

Analysis of the impact of SOCs in the UK presents challenges because much data on outcomes is not in the public domain. For the purposes of this project, therefore, we sourced the majority of data on projects directly from those who manage them, namely intermediaries or Investment Fund Managers (IFMs). Intermediaries and IFMs provided data on 67 of the projects included in our analysis.

The other key source of data was published evaluations which were used to source data on outcomes achieved by projects which did not have an intermediary or IFM, including some funded by the Fair Chance Fund or the Youth Engagement Fund, and some Entrenched Rough Sleepers projects (See Appendix A for details of this and other Funds mentioned in this report).

Intermediaries and IFMs (and published evaluations) also provided data on the quantum of outcome payments made and, in four cases, some other costs incurred by commissioners which together

 $<sup>^{3} \ \</sup> See \ https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/impact-bond-dataset-v2/$ 



constitute the cost of delivery in outcomes contracts. This data enabled us to calculate the net value created by SOCs, although outcomes cost data was not available on four projects (see section 2.3.3).

For SOCs which are not complete and are still in implementation, we used the latest data available on both outcomes claimed and validated (to calculate value) and outcome payments made (to calculate costs). We did not make any assumptions about the future performance of these contracts, since we wanted to base the value case solely on proven outcomes achieved and their costs to date. Since some contracts have several years to run, it is likely that these SOCs will generate further value (and incur further costs) in the future.

A number of SOCs had no intermediary or IFM involvement and were or are managed directly by service providers. Except where data was available from published evaluation on these projects, we excluded them due to data collection and ownership issues. This means that eight projects with potential value are excluded, including six that were funded through the DWP Innovation Fund (and both DWP Innovation Fund SOCs that were implemented outside England).

As explained in section 2.2.2 above we also excluded four projects because they have only recently been implemented and therefore do not yet have outcomes that we could sensibly value, and two projects for other reasons.

# 2.2.4 Approach to financial modelling

We used the data collected to model outcomes estimated to be avoided or achieved through each contract and assign values to those outcomes. We modelled some contracts individually because they were unique and unlike any other contract, but we modelled the majority of contracts in logical groups because they were:

- funded through a single programme and identical in terms of the outcomes that are measured and paid for (usually under a common 'Rate Card'). Examples include the projects funded through the Fair Chance Fund and the Youth Engagement Fund;
- designed and delivered by the same intermediary or service provider as part of a common 'family'
  of projects for example the projects that comprise the Mental Health and Employment
  Partnership (MHEP); or
- had some differences in specific outcome and intervention, but were similar enough to enable common modelling with some variation. For example a number of projects aim to avoid children entering local authority care or reunify those already in care, and therefore have similar broad outcomes and consequences, though they do not comprise a single family of SOCs.

We then aggregated findings from each contract or group of contracts into the six policy sectors that are used to categorise projects within the INDIGO dataset – namely Child and family welfare, Criminal justice, Education, Employment and training, Health, and Homelessness. We report all our findings according to these sectors, as explained further in section 2.3 below.

Many SOCs have outcomes that mean that they could logically fall within more than one policy sectors. We have in nearly all cases reported the value of contracts according to their INDIGO sector, but in one case have changed the category, and have also assigned a category to two projects not in INDIGO. We explain our decisions on this in the relevant part of section 3.



# 2.2.5 Sources for valuing outcomes

In assigning values to adverse outcomes avoided, or positive outcomes created, we drew on a number of sources of standardised costs to the public sector, including:

- The Greater Manchester Combined Authority (GMCA) Unit Cost Database<sup>4</sup>. This is a well-established and widely used source in the calculation of value in relation to SOCs and more generally in assessing the value created by services and interventions. It is an extremely useful resource because it aggregates and curates cost and value data from a wide range of sources, but we have used it with care since there is wide variability in the robustness of data within it and it has not been updated since 2019. We have where appropriate used the latest version<sup>5</sup> of the database (V2.0, updated April 2019).
- The Personal Social Services Research Unit (PSSRU) Unit Costs of Health and Social Care. This is another well-established source which provides useful data on a wide range of costs across health and social care. It is published annually and we drew on the 2021 version<sup>6</sup>, the latest available at the time of our analysis and modelling.
- Other data from published research. We used data from other published sources where it was not in the above sources or appeared to provide a better or more robust source for costs or value created.
- Other local data. In a very few cases (five) we have used local data (collected directly by projects) where it was the best or only source of data available.

Many estimates of cost or value were used in several of the models for our analysis and Appendix B provides a summary of the main costs and sources we have used.

#### 2.2.6 Estimating direct and consequential outcomes

While the outcomes that are avoided or created vary widely between different contracts and groups of contracts, we divide the outcomes to which we have assigned value into two main categories, which we have termed:

- **Direct outcomes.** These are outcomes that are created directly by the contract and measured and paid for through the contract's Rate Card or other payment mechanism. For example, so-called 'edge of care' SOCs tend to include one or more measures of the duration of local authority care avoided by the contract; Homelessness SOCs measure entry to and sustainment of accommodation by those previously homeless and often rough sleeping; and Employment and training SOCs measure qualifications achieved, jobs starts, and periods of employment by duration or value of earnings. In these cases it is possible to predict with high certainty the value created directly by the outcome, because the amount of adverse outcome avoided (e.g. weeks in care) or positive outcome created (e.g. weeks in employment) is measured and validated by the contract we only need to estimate the cost avoided or value created by that validated outcome.
- **Consequential outcomes.** These are outcomes which, based on previous research or the theory of change for the intervention, are likely to be avoided but are not the direct result of the intervention or measured outcomes. For example, there is good evidence that those who are

 $<sup>^4\ \</sup> See\ https://www.greatermanchester-ca.gov.uk/what-we-do/research/research-cost-benefit-analysis/$ 

<sup>5</sup> Where costs in the Unit Cost Database or other sources were not at current prices we converted them to 2021/22 prices using the GDP deflator figures presented alongside the 2021 Spring Statement.

<sup>&</sup>lt;sup>6</sup> See https://www.pssru.ac.uk/project-pages/unit-costs/unit-costs-of-health-and-social-care-2021/



looked after by a local authority are more likely to become long-term NEET (Not in Employment, Education or Training). We have included such outcomes where there is evidence to suggest a likely consequential impact, but there is inevitably a higher degree of uncertainty about both the applicability and scale of such outcomes.

In part because of the uncertainty around consequential outcomes we have assigned a confidence level to all our value estimates, as explained further in section 2.3.2 below.

# 2.3 Presentation of findings

As explained above we present all our findings in this report either across all contracts or by the six policy sectors that are used to group projects in the INDIGO dataset. Our findings are also sub-divided and qualified as described further below.

# 2.3.1 Fiscal, social and economic value

We have broken down total value and value by sector into three main categories (Fiscal, Social and Economic). These categories are used in the GMCA's Unit Cost Database and are in our view extremely useful ways of distinguishing different types of value. In summary these categories of value are defined as follows:

- Fiscal value: direct savings to or costs avoided by the public sector due to a specific intervention.
- Social value: wider gains to society such as improvements to health, educational attainment or reduced crime.
- **Economic value**: net increase in earnings or growth in the local economy.

We have also attempted to further break down fiscal value into what are commonly termed 'cashable savings' and 'avoided costs'. We would however caution against over-interpretation of these estimates since there is much debate about what is 'cashable' in relation to value created by SOCs, and in general we take an extremely cautious view of what is truly cashable – in particular we are sceptical of the theory that fixed costs (such as staff and buildings) can be converted into cashable savings even where the scale of cost reduction is of sufficient scale. In practice, this rarely happens because the scale needed to achieve such savings can be huge (e.g. enough imprisonments avoided to close a wing) and there are always other demands that replace those avoided. Please see the definition of cashability in Appendix A, which provides examples of when costs might be cashable and when not. Further useful guidance on the principles of cashability in the context of cost benefit analysis can also be found in a GMCA discussion paper<sup>7</sup>.

Equally if not more importantly our experience as both advisors on and evaluators of SOCs is that this is an increasingly unhelpful distinction which implies that a cashable saving is of much higher value than an avoided cost. In practice both are of largely equal benefit to a public sector body aiming to release value and the more important distinction is between fiscal value that usually accrues directly and in the short term to the outcomes payer, and wider social value which usually accrues in the longer term and to a combination of agencies.

<sup>&</sup>lt;sup>7</sup> See https://www.greatermanchester-ca.gov.uk/media/1584/cashability\_discussion\_paper.pdf



#### 2.3.2 Confidence level

We have also divided our total and sectoral value calculations into three levels based on the degree of confidence we have in the extent to which the value is likely to be achieved. This reflects the difference between direct and consequential value outlined above and, for consequential outcomes, the strength of evidence behind likely sustainment of value. For the purposes of this report we define the three confidence levels as follow:

- High: Value very likely to occur because it will be created directly by the outcomes measured under the contract (or has already been created) and there is strong evidence for the adverse outcome and cost that would otherwise occur. For example a contract that enables children in residential care to move to foster care is certain to create value because foster care costs are always lower than residential costs and the value occurs as soon as the move is made, and for the period validated by the contract.
- Medium: Value likely to occur but not certain because based on predictions of future outcome
  that are consequential to the main outcome for example there is strong evidence that a young
  person who avoids becoming looked after is less likely to become long-term NEET, but the extent
  to which avoidance of care impacts directly on the adverse outcome is harder to predict.
- Low: Value less certain to occur and outcomes more consequential to main outcome. For
  example there is some evidence that a homeless person is more likely to become an offender,
  but we cannot with confidence predict either the prevalence or severity of offending, especially
  if it leads to imprisonment.

We would note that value assigned low confidence in our analysis also forms a relatively small proportion of total value since areas of value in which we have low confidence tend also to be areas where we have made cautious assumptions about the scale of value. Thus in the above example we have made very cautious assumptions about how many people diverted from homelessness would otherwise offend or be imprisoned, and also assigned low confidence to the value that results from those assumptions<sup>8</sup>.

## 2.3.3 Gross and net present value, and Benefit Cost Ratio

In breaking down value as above we are in all cases referring to gross value – that is the total value that we estimate is created directly or consequentially by the outcomes contract, irrespective of the value of outcome payments (and in a very few cases other payments<sup>9</sup>) made by commissioners or other 'outcomes payers'. All estimates of gross value are shown at 'present value' which means that the future value of benefits created by these contracts has been discounted, where necessary, to present value by applying a Social Time Preference Rate (STPR)<sup>10</sup> of 3.5%.

At the sector and overall summary level, we have also calculated and shown two important measures of social or public value that are recommended in the Treasury 'Green Book' (see 2.3.4 below). These are:

<sup>&</sup>lt;sup>8</sup> We have also excluded some more tendentious areas where benefit/value might occur entirely, which also lowers the overall quantum of Low confidence value

<sup>&</sup>lt;sup>9</sup> In a small number of SOCs commissioners separately pay an intermediary to manage the contract on their behalf

<sup>&</sup>lt;sup>10</sup> See definition in Appendix A. The Green Book sets the STPR by default at 3.5%



1. **Net Present Social Value (**NPSV) This is defined as the present value of benefits less the present value of costs. In each sector, therefore, the NPSV calculation is:

Present value created by contracts for which we have data on outcome payments

less

The total value of outcome and other payments for these contracts

We have been able to do this calculation for 72 of the 76 SOCs included in this analysis. We do not have data on outcome payments in the remaining four cases. These are the two projects listed in INDIGO as being in the Criminal Justice sector, and two other projects.

2. **Benefit Cost Ratio (BCR)** This is defined as the ratio of the present value of benefits to the present value of costs. The BCR calculation is therefore:

Present value created by contracts for which we have data on outcome payments

The total value of outcome and other payments for these contracts

Again we were able to calculate a BCR only for the 72 projects where we have data on outcome payments and other delivery costs.

#### 2.3.4 Adherence to Green Book principles

The Green Book is guidance issued by HM Treasury on how to appraise policies, programmes and projects. While we do not claim that this project is a full appraisal to Green Book standards we have aimed to adhere to important principles of the Green Book in undertaking this analysis, and in particular to follow the guidance in Chapter 5 of the Green Book on Social Cost Benefit Analysis. A fuller explanation of where we have followed and where we have diverged from the Green Book is provided at Appendix C of this report, but in summary we have:

- shown all values first adjusted for inflation and then discounted to present values using the Treasury recommended Social Time Preference Rate of 3.5% per annum;
- estimated overall value using both NPSV and BCR measures as explained above; and
- aimed to control for optimism bias by making deliberately cautious assumptions about the scale
  of benefit that is likely to occur from each contract or group of contracts. We explain why and
  how we have done this in section 2.3.5 below.

We have also made use where appropriate of supplementary guidance to the Green Book, produced by the Treasury and Social Impact Task Force, on the appraisal of social and public value from improved wellbeing. The improvement of wellbeing is an explicit feature of many SOCs and is often a paid outcome metric, measured through a range of tools such as the Warwick Edinburgh mental wellbeing scale or the Wellbeing Star. This guidance is therefore extremely useful in setting an estimated value for a year of improved wellbeing (a wellbeing year or 'WELLBY'), the median value of which is estimated by the guidance to be £13,000 at 2019 prices. Prior to development of this guidance it was extremely difficult to estimate the value of improved wellbeing, even where robustly and independently measured, and wellbeing improvement tended either to be ignored in value cases or estimated using sometimes inappropriate proxies — such as reduced demand for mental health treatment.



We have however assigned value to wellbeing based on this guidance only in limited circumstances, and at high confidence only where wellbeing is specifically measured independently using a recognised measurement tool as part of the outcomes framework and payment mechanism for the project – i.e. wellbeing is a direct outcome as defined in section 2.2.5 above. We have only valued wellbeing as a consequential outcome where there is strong evidence from available literature that wellbeing is likely to improve, and have done so only at low confidence, and assuming low sustainment (typically for only six months or half a wellbeing year).

# 2.3.5 Avoiding optimism bias and overestimation of value

Finally, we have aimed to ensure that we avoid optimism bias and overestimation of value at all stages of this analysis, and taken a number of steps to ensure our analysis is realistic. As explained above a key area of optimism bias in relation to SOCs (namely the overestimation of outcomes likely to be achieved) is not a risk in this analysis because we have based it solely on actual outcomes data. There is risk of optimism bias in other areas including overestimating the value of direct outcomes, and overestimation of the value or prevalence of consequential outcomes. We have sought to avoid such risk in a number of ways. In particular we have:

- Used cost estimates which are likely to under rather than overestimate value. For example we have used average costs, taken from the PSSRU Unit Costs of Health and Social Care, for the costs of residential and foster care avoided by SOCs. These costs are lower than those we have observed when developing value cases using a local authority's own data, especially when the cohort has additional or complex needs<sup>11</sup>.
- Made 'worst case' assumptions about the sustainment of outcomes which are time dependent. Where direct outcomes measure sustainment over time e.g. weeks of care avoided, months in accommodation, months in employment etc, we have made no allowance for the outcome being sustained longer than measured. For example, where a direct outcome is achieving six months employment (as in many Employment and training sector SOCs, and several SOCs in other sectors) we have assumed no employment beyond this point. This is clearly a worst case and unlikely assumption, but it means that we can be extremely confident about the value created. We have made similar worst case calculations in relation to other metrics.
- Made conservative estimates about the future prevalence of consequential adverse outcomes. For example although some Employment and training SOCs were explicitly aimed at young people at risk of becoming NEET we have made very cautious assumptions about the numbers achieving direct outcomes (such as employment or qualifications) that will also avoid becoming NEET.
- Assigned no value to many outcomes. For example many SOCs make payments for the achievement of education and training outcomes, including entry to education and training, part completion of courses and the achievement of qualifications at levels 1, 2 and 3. We have not included values for many of these 'progress' outcomes and have only included the economic value of level 2 and 3 qualifications. There are also numerous consequential outcomes that are likely to occur (and might be avoided by an intervention funded through an SOC) but which we have not included because we do not have good evidence for the value of the outcome avoided, or for the likely impact of an intervention on that outcome. An example is that young people in residential care are known to be at higher risk of criminal exploitation, but we cannot, even with

<sup>&</sup>lt;sup>11</sup> For example in one recent case the average cost of care for a higher risk child was £1,500, compared to the £647 figure we have used



low confidence, predict either the scale or value of criminal exploitation avoided if young people are diverted from care, or step down from residential to foster care, by a SOC.

Where we have not made adjustments is to allow for the possibility that some outcomes, and therefore value, might not be attributable to the interventions funded by the SOCs, often termed 'deadweight'. We have not made specific allowance for this because the 76 contracts to which we have assigned value already include a wide range of contractual and measurement arrangements that aim to take account of deadweight. These range from rigorous measurement against a comparison group, through measurement against a baseline, to the calculation of outcome targets and payment in ways that aim to take account of likely deadweight. In addition, there are some contracts where a persuasive case can be made for there being very little deadweight because the outcome would be very unlikely to occur without the specific intervention funded by the SOC. For all these reasons we have chosen not to discount our overall value calculations for deadweight.

In summary, although there is a small risk that our analysis overestimates some values where deadweight might be relevant, any overestimation will be offset by the way in which we have deliberately arrived at lower values by using conservative assumptions in our modelling.

It is therefore our view that the value case set out in this report almost certainly underestimates the total and net present value created by all SOCs to date.



# 3. Findings

#### 3.1 Introduction

This section presents the findings from our analysis divided by INDIGO policy sector, and showing total (gross) value, NPSV and BCR. Findings are presented alphabetically by sector except that the four projects for which we do not have cost data (and therefore cannot calculate NPSV and BCR) are presented last. These include both projects listed in INDIGO as being in the Criminal justice sector.

Where projects form logical groups that we modelled together (see section 2.2.4) we have shown the gross value of that group. Where projects within a sector were modelled separately we have grouped them into an 'Other projects' group, and shown the value of that group as a whole.

We also show value within each sector by whether we consider it fiscal, social or economic value; and whether we have high, low or medium confidence in our value estimates. In each case we have explained the main drivers of value, with further detail in Appendices D-I.

Our findings show wide variation between each sector in scale of total value, NPSV and BCR, and in the type of value we think will be created. It is important to stress that this does not imply that any sector or particular type of contract is intrinsically better or worse in terms of performance or suitability for SOCs. There are numerous reasons why different sectors and groups of contracts produce different levels and types of value, including, among others, the total number of contracts in each sector, the size and complexity of those contracts, the nature and objectives of the interventions, and the natural propensity of different types of contract to generate different types of value. In addition, many SOCs have numerous outcomes across more than one sector, and are explicitly designed to address complex needs that do not sit neatly within a single sector.

# 3.2 Findings – Child and family welfare sector

#### 3.2.1 Overall Value

Our analysis of the Child and family welfare sector includes 18 projects. We excluded two projects in this sector as defined in INDIGO because we could not easily obtain data on them, and one further project because it appears to have been combined with another project. We estimate total present value created by SOCs in this sector to be £388.8 m as shown in Table 2 below.

Project group	No. of SOCs	Present value created
Residential step down projects	4	£17.2 m
Avoidance of care projects	6	£243.1 m
Care leavers projects	3	£79.3 m
Other projects	5	£49.2 m
Total present value		£388.8 m

Table 2 - Total present value created - Child and family welfare Sector



The total cost of outcome payments for the projects in this sector is £35.62 m. The NPSV for this sector is therefore £353.20 m and the BCR is 10.92.

The main areas of direct value created in the sector are in the reduced cost of care for children and young people who are enabled to step down from residential care to relatively less expensive foster care, and in the avoidance of care costs (both residential and fostering) in avoidance of care projects. Value is also created by other costs avoided directly through reduced care placements – for example the pupil premium which is paid for all children in care, and the cost of care proceedings.

The care leavers projects are classed as Child and family welfare projects because they support young people who have been in care but the main direct outcomes of these projects were in employment, education and training and it is these outcomes that drive most value (note that these SOCs are good examples of projects which sit across more than one sector). The 'Other' group of projects includes one which creates value both by reducing the incidence of care and by reducing escalation within the care system, and also projects which create value by reducing the costs of caring for adults.

The main consequential outcomes are the result of those who avoid care having reduced risk of becoming long-term NEET and of offending. Please see Appendix D for further details of the projects in this sector and the areas where we have assumed value creation.

# 3.2.2 Total value by Category and Confidence Level

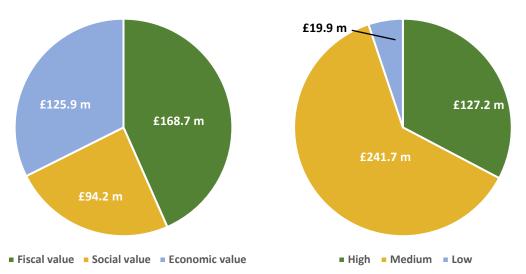
Table 3 and accompanying charts below show the breakdown of total value by category and by confidence level for this sector. We estimate that around £120 m of the fiscal value might be cashable, and the rest avoided costs.

Fiscal value is relatively high in this sector because a high proportion of the value accrues to local authority commissioners and relates to the cost of care placements that are not required (or in the case of step down become less expensive) because of the impact of the interventions funded through the SOCs.

Category	Present value	Confidence level	Present value
Fiscal	£168.7 m	High	£127.2 m
Social	£94.2 m	Medium	£241.7 m
Economic	£125.9 m	Low	£19.9 m

Table 3 – Breakdown of total Child and welfare value





# 3.3 Findings – Education sector

#### 3.3.1 Overall Value

There are six projects in the Education sector in line with classification in the INDIGO dataset. A seventh project in this sector is not included in our analysis because it is too early stage to have results to which we can attribute value.

Three of these are projects which aim in different ways to improve school readiness pre-school and/or improve attendance, attitude and behaviour, and attainment of children when in school. The other three are all independent travel training projects that form part of a single family. These are classified as Education projects because they enable children with special needs to travel to school without using specialist transport.

We estimate gross present value created by SOCs in this sector to be £41.2 m as shown in Table 4 below.

Project group	No. of SOCs	Present value created
School readiness/attainment projects	3	£39.5 m
Travel training projects	3	£1.7 m
Tot	al present value	£41.2 m

Table 4 – Total present value created – Education Sector

The total cost of outcome payments for the projects in this sector is £6.77 m. The NPSV for this sector is therefore £34.47 m and the BCR is 6.09.

Assessing the value created by the school readiness and attainment projects is complex because there are numerous short and longer-term outcomes to consider, and by definition we are predicting some outcomes many years in advance of occurrence. We have however benefited from having undertaken more detailed value cases for two of the three projects included here, based on much more in-depth analysis of the cohorts, the impact of the interventions, and research showing the likelihood of



consequential outcomes occurring in later life. Direct and relatively short-term value is created by children being 'school ready' and closing the so-called 'attainment gap', and needing less support through their school life. Medium- and longer-term value comes from a number of areas including children being less likely to be excluded from school, less likely in a small number of cases to become looked after, and more likely to gain qualifications. Appendix E explains our assumptions in more detail.

The travel training projects generate value mainly through reducing the cost of specialist home to school transport for local authorities, and we also assumed some improvement in wellbeing for those able to travel independently since there is good evidence for improvement in this area, as explained in Appendix E.

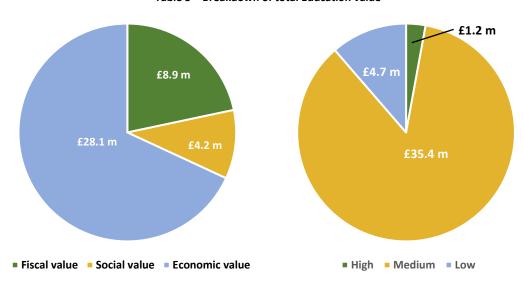
# 3.3.2 Total value by Category and Confidence Level

Table 5 and accompanying charts below show the breakdown of total value by category and by confidence level for this sector. Around £0.6 m of the fiscal value is likely to be cashable, and relates to the ability of local authorities to release some savings through the travel training projects. Nearly all the value created by the school readiness and attainment projects is likely to be avoided costs, and much of it is longer-term social and economic value created by children doing better at school and carrying that improvement into later life.

Although we think attainment projects create considerable value we are reluctant to put high confidence on our estimates because of the challenges outlined above of accurately predicting long-term value. Nearly all the value is therefore at medium or low confidence.

Category	Present value	Confidence level	Present value
Fiscal	£8.9 m	High	£1.2 m
Social	£4.2 m	Medium	£35.4 m
Economic	£28.1 m	Low	£4.7 m

Table 5 – Breakdown of total Education value





# 3.4 Findings – Employment and training sector

#### 3.4.1 Overall Value

Our analysis of the Employment and training sector includes 17 projects. All of these form part of larger groups of projects, two funded by central government (the DWP Innovation Fund and the Youth Engagement Fund) and one family of similar (but not identical) projects commissioned by local authorities and NHS clinical commissioning groups, and part funded by the Commissioning Better Outcomes (CBO) programme or the Life Chances Fund (LCF) – the Mental Health Employment Partnership (MHEP). We excluded six projects in this sector as defined in INDIGO because we could not easily obtain data on them, all of which were projects funded by the DWP Innovation Fund. In addition, one project which falls in this sector in INDIGO is included later below in the Criminal Justice/other sector (see section 3.7) because we do not have data on the cost of outcome payments for it, and therefore cannot calculate NPSV and BCR.

We estimate gross present value created by SOCs in this sector to be £599.6 m as shown in Table 6 below.

Project group	No. of SOCs	Present value created
Youth Engagement Fund projects	4	£292.3 m
MHEP projects	9	£12.3 m
DWP Innovation Fund projects	4	£294.9 m
Total present value		£599.6 m

Table 6 – Total present value created – Employment and training Sector

The total cost of outcome payments for the projects in this sector is £33.87 m. The NPSV for this sector is therefore £565.7 m and the BCR is 17.7.

All the projects in this group except the MHEP family have similar outcomes and the Youth Engagement Fund (YEF) was to an extent a development of the DWP Innovation Fund, with a different and longer Rate Card. In simple terms, both funds aimed to improve employment and training outcomes and in particular enable people to gain qualifications and enter work. Both had quite complex Rate Cards which rewarded progression towards qualifications and employment as well as attainment, and aimed to ensure that younger people did not become long-term NEET by improving in-school motivation.

As Table 6 shows these two programmes generate significant value. This is in part because of the social and economic value attaching to the outcomes they achieved (notably level 2 and 3 qualifications and an assumed level of avoidance of long-term NEET) but also because of their scale – the YEF alone enabled more than 800 people to achieve a level 2 qualification and more than 100 to achieve a level 3 qualification.

MHEP is a different set of projects focused on enabling people with mental health issues (and in one project drug and alcohol issues) to find and sustain work, and working more intensively with smaller and more challenging cohorts. We would therefore caution against any simplistic comparison of the



values we assign to these projects, especially since we are aware that a number of the projects within this group are at a relatively early stage.

# 3.4.2 Total value by Category and Confidence Level

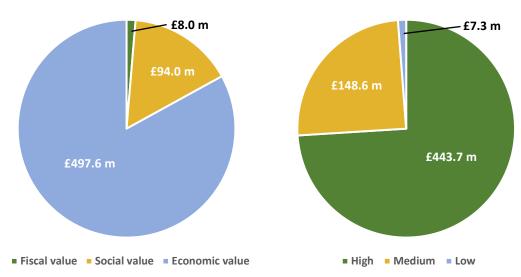
Table 7 and accompanying charts below show the breakdown of total value by category and by confidence level for this sector. This shows the fiscal value is a small proportion of the total at £8.0 m, and we estimate that around £7.7 m of this might be cashable.

As this breakdown also shows, the value in this sector is heavily weighted towards economic value and much of this is due to qualifications, with each level 2 qualification having a lifetime economic value of nearly £170 k and each level 3 qualification a further £200 k. The avoidance of long-term NEET (albeit assumed at lower levels of prevalence) also has major social and economic value. Fiscal benefit is mainly in actual employment gained and therefore reduced benefit costs to DWP, and is relatively low in part because the initial employment sustained by these projects and measured by the SOCs is low (typically 3 or 6 months). As already explained in section 2, we have been extremely prudent in assuming no sustainment of employment beyond these periods across all programmes.

We have high confidence in a high proportion of our value estimates because they are created directly by validated outcomes – notably employment and qualifications.

Category	Present value	Confidence level	Present value
Fiscal	£8.0 m	High	£443.7 m
Social	£94.0 m	Medium	£148.6 m
Economic	£497.6 m	Low	£7.3 m

Table 7 - Breakdown of total Employment and training value





# 3.5 Findings – Health Sector

#### 3.5.1 Overall Value

Our analysis covers 11 projects defined as being in the Health sector. This excludes three projects listed in INDIGO as Health because they are too early stage to have useful data and includes two not listed in INDIGO – both End of Life Care projects. It also excludes one project for which we do not have outcomes payment data, and which we have therefore included in section 3.7 below along with Criminal justice projects. Conversely, it includes one project which is classified in INDIGO as in the Homelessness sector but which we have classed as Health because its cohort are not homeless and its focus is on enabling people with mental health issues to move from residential care into independent living in the community.

We estimate gross present value created by the SOCs in this sector to be **£177.9 m** as shown in Table 8 below.

Project group	No. of SOCs	Present value created
Health management projects	3	£55.2 m
End of life care projects	4	£23.4 m
Other projects	4	£99.3 m
Total present value		£177.9 m

Table 8 – Total present value created – Health Sector

The total cost of outcome payments for the projects in this sector is £20.72 m. The NPSV for this sector is therefore £157.15 m and the BCR is 8.59.

As Table 8 shows seven of the 11 projects in this sector fall into two logical groups: four End of Life Care projects which are part of a single family; and three health management projects which are not one family but do form a group of contracts and projects with similar aims – to support people with long-term health conditions (such as Type 2 diabetes or hypertension) to manage them better and thus improve their health. Each of these three projects are different in scale and target a different range of conditions.

The other projects in this group are disparate and have very different interventions, outcomes and levels of value created. Please see Appendix G for further details of assumptions in this sector.

Despite the differences in scale and type of these projects the outcomes they achieve that create value are often similar. Projects avoid or reduce the cost of health treatment in various ways, including hospital admissions, visits to primary care and visits to A&E. In addition a number of the projects have a proven and positive impact on wellbeing, and in some SOCs wellbeing is measured directly by the projects, enabling us to value improved wellbeing with high or medium confidence.



# 3.5.2 Total value by Category and Confidence Level

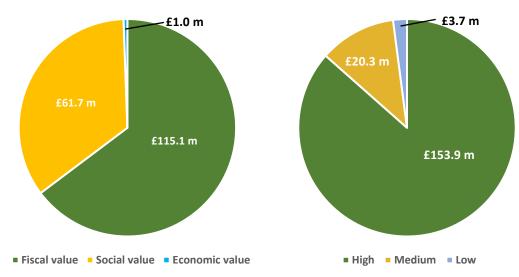
Table 9 and accompanying charts below show the breakdown of total value by category and by confidence level for this sector. As this shows the fiscal value is relatively high but the proportion of this that is likely to be cashable is in our view negligible, partly because of the way health budgets are constructed and partly because all value is within a health system where demand significantly exceeds supply. However this does not diminish the value of these avoided costs to commissioners and it is worth noting that the outcome metrics for a number of these projects directly link payment to the achievement of cost reductions.

The majority of social value is created by improved wellbeing, which we have categorised throughout this analysis as a social benefit. Economic value is negligible, and accounted for entirely by an assumed modest improvement in employment among people previously unable to work and now able to do so, thanks to better management of their conditions.

In part because cost reductions that create fiscal value are measured directly in some of these projects, we have high confidence in a good proportion of our estimates, some of which are based directly on the agreed value created and verified through project payment mechanisms.

Category	Present value	Confidence level	Present value
Fiscal	£115.1 m	High	£153.9 m
Social	£61.7 m	Medium	£20.3 m
Economic	£1.0 m	Low	£3.7 m

Table 9 – Breakdown of total Health value





# 3.6 Findings – Homelessness Sector

# 3.6.1 Overall Value

Our analysis of the Homelessness sector covers 20 projects defined as such in the INDIGO dataset. It excludes one project defined as Homelessness but which we chose to include in the Health sector (see 3.5.1 above) and another which was too early stage to provide outcomes that we could value.

We estimate gross present value created by the SOCs in this sector to be **£210.5 m** as shown in Table 10 below.

Project group	No. of SOCs	Present value created
Entrenched rough sleeping projects	7	£46.1 m
Fair Chance Fund projects	8	£68.6 m
Single Homelessness Prevention projects	2	£42.1 m
Other projects	3	£53.6 m
Total present value	£210.5 m	

Table 10 - Total present value created - Homelessness Sector

The total cost of outcome payments for the projects in this sector is £41.79 m. The NPSV for this sector is therefore £168.67 m and the BCR is 5.04.

The projects in this sector are arguably the most homogeneous, with the exception of the single homelessness prevention projects which aim to prevent people becoming homeless by addressing the issues that might cause it at an earlier stage. The remaining projects in this sector include two groups that use the same Rate Card: the seven Entrenched Rough Sleeping projects (funded by the Ministry of Housing, Communities and Local Government) and seven projects which were part of the Fair Chance Fund or FCF (funded by the Department of Communities and Local Government and the Cabinet Office) plus one project that was funded by local commissioners and the CBO programme, but used the same FCF Rate Card. The three 'Other' projects had similar outcomes in that all aimed to address homelessness and /or rough sleeping by moving people into accommodation and sustaining them there. All the projects also include training and employment outcomes which, along with the avoidance of rough sleeping, create substantial public value.

The Entrenched Rough Sleeping SOCs also included direct outcome metrics relating to mental health and drug and alcohol issues and it is therefore possible to predict the likelihood of these adverse outcomes reducing, and value being created with more certainty. In addition, ATQ has completed a detailed value case for one of the Entrenched Rough Sleeping SOCs and we have therefore been able to draw on more detailed research into likely prevalence and impact of intervention in a number of outcome areas, including the prevalence of previous offending and physical health issues. This enabled us to make some cautious assumptions (at low confidence) about the likelihood that these SOCs will prevent future offending and improve health outcomes.



The single homelessness prevention projects create value in similar areas but with less certainty because the projects aim to prevent future adverse outcomes rather than address existing ones. ATQ has also undertaken a detailed value case into this service and we have been able to make reasonable assumptions based on previous research.

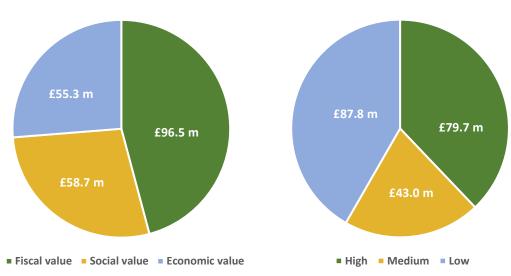
# 3.6.2 Total value by Category and Confidence Level

Table 11 and accompanying charts below show the breakdown of total value by category and by confidence level for this sector. We estimate that around £36 m of the fiscal value might be cashable and the remainder will be avoided costs. Both social and economic value are created by longer-term outcomes including the gaining of qualifications, the prevention of people becoming long-term NEET, and some improvements in wellbeing.

We have high confidence in a significant proportion of our analysis because many areas of value are generated directly by outcomes measured, validated and paid for under the respective Rate Cards, including qualifications, employment, and the sustainment of accommodation. Equally, we have low confidence in the value likely to be created by reduced offending, and in some of the value created by the prevention projects because it is harder to predict future outcomes for such earlier stage, preventative interventions.

Category	Present value	Confidence level	Present value
Fiscal	£96.5 m	High	£79.7 m
Social	£58.7 m	Medium	£43.0 m
Economic	£55.3 m	Low	£87.8 m

Table 11 - Breakdown of total Homelessness value





# 3.7 Findings – Criminal justice/other sector

#### 3.7.1 Overall Value

This final section covers the two projects classified as Criminal justice in the INDIGO dataset, plus two other projects (one in the Employment and training sector and one in the Health sector) for which we do not have data on outcome payments and are therefore unable to calculate NPSV and PCR.

We estimate gross present value created by these SOCs to be £40.9 m as shown in Table 12 below.

Project group	No. of SOCs	Present value created	
Criminal justice projects	2	£23.1 m	
Other projects	2	£17.8 m	
Total present value		£40.9 m	

Table 12 - Total present value created - Criminal justice/other Sector

The criminal justice projects aim to reduce reoffending and measure and pay for reduced offending directly, and in different ways. There is therefore relatively robust measurement of reduced offending (in one project very robust measurement against a strong comparison group). Even so it is very challenging to estimate the value created by reduced offending accurately because we cannot easily predict either the scale and severity of such offending and therefore its concomitant public value. The costs of prison are high (more than £40k per prisoner per year) and the costs of non-custodial offences to both the criminal justice system and more widely (e.g. health impacts) can also be considerable; but these will vary hugely according to the severity and frequency of offences, with violent crime tending to incur much higher costs. In line with the cautious approach described in section 2.3.5 of this report we have therefore been conservative in assuming both the severity and scale of offending avoided and the likelihood of custody – please see Appendix I for more details.

The project in this group which is defined in INDIGO as a Health project also focuses on reducing offending and therefore has some similar outcomes and value creation to the Criminal justice projects. Both this project and one of the Criminal justice SOCs also directly measure and pay for the achievement of qualifications. As in other sectors qualifications have a significant economic value and it is also reasonable to assume that a proportion of those who avoid offending and achieve qualifications will in addition avoid other adverse outcomes – notably becoming long-term NEET.

The remaining project has similar outcomes and areas of value creation to projects in the Employment and training sector, as described in section 3.4.

## 3.7.2 Total value by Category and Confidence Level

Table 13 and accompanying charts below show the breakdown of total value by category and by confidence level for this sector. Nearly all the fiscal value is avoided costs, in our view, with only employment likely to create cashable savings.

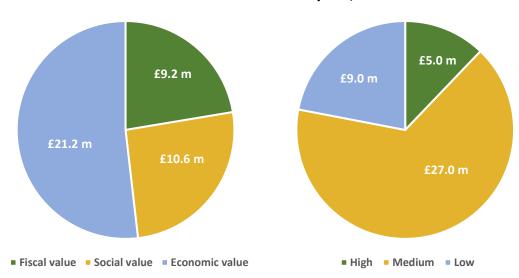
Fiscal value is created by assumptions about the avoidance of future offending and its consequences as outlined above, and social and economic value by the positive impact of qualifications achieved and



the avoidance of long-term NEET. We have high confidence in the creation of some of the value from reduced offending though the majority of value is at medium or low confidence because of the difficulties of predicting future outcomes outlined above.

Category	Present value	Confidence level	Present value
Fiscal	£9.2 m	High	£5.0 m
Social	£10.6 m	Medium	£27.0 m
Economic	£21.2 m	Low	£9.0 m

Table 13 – Breakdown of total Criminal justice/other value





# **Appendices**



# Appendix A - Glossary of terms

Please note that the definitions of technical terms shown here are taken from the GO Lab Glossary (available at <a href="https://golab.bsg.ox.ac.uk/knowledge-bank/glossary/">https://golab.bsg.ox.ac.uk/knowledge-bank/glossary/</a>) except where otherwise stated.

#### Baseline

The state before the intervention, against which progress can be assessed or comparisons made.

Example: Baseline data for an educational intervention might encompass attendance rates or grades of a specific cohort before the intervention takes place.

#### Cashability

The extent to which a change in an outcome or output will result in a reduction in spending, such that the expenditure released from that change can be reallocated elsewhere.

**Example**: An example of a 'cashable' saving is often observed in the area of employment. If a person is receiving unemployment subsidy previous to an intervention and as a result of that intervention enters the labour market, government spending related to that unemployment subsidy is reduced and is available to be spent elsewhere. An example of a 'non-cashable' saving could be observed in the health sector, where an intervention leads to, for example, less emergency visits or use of hospital services. In this case, while the intervention may result in less demand, it may not lead to cashable savings unless services become surplus to requirements and are terminated or surplus facilities are closed.

#### **Care Leaver projects**

(ATQ definition) The Care Leaver projects were funded by the Department for Education (DfE) Innovation Fund to the tune of £5m. This would be used, according to the DfE, 'to fund the first ever Social Impact Bonds aimed at preventing care leavers being out of work and training'.

# Commissioning Better Outcomes (CBO) Fund

A programme funded by The National Lottery Community Fund which is defined in CBO evaluation reports as having 'a mission to support the development of more social impact bonds (SIBs) and other outcome-based commissioning (OBC) models in England'.

# **Comparison group**

(ATQ definition) A group similar to the group receiving the intervention (known as the treatment group) which does not receive the intervention and therefore provides a basis for evaluating what outcomes would have occurred anyway (sometimes termed the counterfactual). Ideally the comparison group should be as similar as possible to the treatment group and can, for example, be a group in the same area but randomly assigned no treatment, a comparable group in an adjacent area, or a national statistical sample selected to be as similar as possible to the treatment group.



Deadweight

Outcomes which would have happened anyway, regardless of an intervention, policy or investment.

**Entrenched Rough Sleepers Projects** 

(ATQ definition) These projects were part of the Entrenched Rough Sleeping programme, funded by the Department for Communities and Local Government. This included £10 million in funding specifically for Social Outcomes Contracts (described as SIBs in government documents).

**Fair Chance Fund** 

(ATQ definition based on government description) A fund supported by the Department for Communities and Local Government (DCLG) and Cabinet Office which aimed to improve accommodation and work outcomes for young, homeless people whose support needs are poorly met by existing services because of the complexity of their circumstances.

Family [of projects]

(CBO fund definition) A family of projects refers to SOCs which have very similar characteristics and were/are usually developed by the same organisation in the expectation that contracts following the common model will be commissioned by different outcomes payers.

**Innovation Fund** 

(ATQ definition based on government description) The Innovation Fund was supported by the Department for Work and Pensions (DWP) and aimed 'to support disadvantaged young people by helping them participate in education and training to improve their employability'. The fund aimed to support the development of the social investment market and test the generation of benefit savings alongside wider fiscal and social benefits'.

Life Chances Fund (LCF)

According to government guidance the LCF was 'an £80m fund, committed by central government to help people in society who face the most significant barriers to leading happy and productive lives. It provides top up contributions to outcomes-based contracts involving social investment, referred to as Social impact Bonds (SIBs).... These contracts must be locally commissioned and aim to tackle complex social problems'.

Outcome

The outcome is what changes for an individual as the result of a service or intervention.

**Example:** Improved learning in school, better mental health, sustained employment.

**Outcome payer** 

The organisation that pays for the outcomes in a Social Outcomes Contract or impact bond. Outcome payers are often referred to as commissioners.

Payment by Results (PbR)

The practice of paying providers for delivering public services based wholly or partly on the results that are achieved.



#### **Rate Card**

In the context of PbR or SOCs, a Rate Card is a schedule of payments for specific outcomes an outcome payer is willing to make for each participant, cohort or specified improvement that verifiably achieves each outcome.

# Social Impact Bond (SIB)

A type of outcome-based contract that incorporates the use of private funding from social investors to cover the upfront capital required for a provider to set up and deliver a service.

# Social Outcomes Contract (SOC)

(ATQ definition). A contract that links payment to the achievement of social outcomes. SOCs may be supported by social investors and are therefore similar to Social Impact Bonds but are considered by many to be a better descriptive term because such contracts are not Bonds in the way such instruments are usually defined.

# Social Time Preference Rate (STPR)

According to the 'Green Book' STPR is the discount rate used in appraisal of social value to reflect the concept of time preference – that generally people prefer to receive goods and services now rather than later.

The STPR has two components:

- 'time preference' the rate at which consumption and public spending are discounted over time, assuming no change in per capita consumption. This captures the preference for value now rather than later; and
- 'wealth effect' this reflects expected growth in per capita consumption over time, where future consumption will be higher relative to current consumption and is expected to have a lower utility.

# Youth Engagement Fund (YEF)

According to the prospectus that accompanied its launch, the YEF was 'a £16 million payment by results fund' that aimed 'to help disadvantaged young people aged 14 to 17 to participate and succeed in education or training. This will improve their employability, reduce their long-term dependency on benefits, and reduce their likelihood of offending. The funding will be provided through social impact bonds (SIBs) with investors funding innovative initiatives to prevent young people from becoming NEET (not in education, employment or training)'.



# Appendix B – Cost and value data

Table B.1 below summarises the main cost and value data that we have drawn on in assigning value to adverse outcomes avoided or positive outcomes created as a result of the SOCs included in our analysis. Costs and value are shown categorised according to whether they create fiscal, social or economic value where appropriate, and are shown at the values used in the analysis – i.e. at 2021/22 prices.

Please note that discounting to net present value was undertaken after calculation of costs and uprating for inflation in line with Green Book guidance. However several costs shown here – notably the lifetime costs of becoming NEET and economic value of qualifications, were already discounted to net present value in source literature.

We list main cost areas in approximate order of sector (i.e. starting with those used in modelling value for Child and Family Welfare projects) though many items are used throughout the analysis and across various sectors.

Cost/value item	Unit of cost/value	Fiscal cost/ value per unit	Social cost/ value per unit	Economic cost/ value per unit	Source
Residential care of children – private placement	Per week	£4,086			PSSRU Unit costs of health and social care 2021. Mean costs for children looked-after in externally provided children's homes.
Residential care of children – local authority placement	Per week	£5,284			Unit Cost database. Residential care home for children based on PSSRU costs as above.
Foster care of children	Per week	£637			PSSRU as above. Average cost of foster care per week.
Pupil premium paid for a child in care	Per year	£2,345			Value of pupil premium per pupil per year in 2021/22 – see https://www.gov.uk/government/publications/pupil-premium-allocations-and-conditions-of-grant-2021-to-2022/pupil-premium-conditions-of-grant-2021-to-2022-for-local-authorities



Cost/value item	Unit of cost/value	Fiscal cost/ value per unit	Social cost/ value per unit	Economic cost/ value per unit	Source
Cost of home to school transport for those in mainstream education	Per year	£4,081			Based on 2019 Research for the Local Government  Association and the average value of transport by taxi, calculated to be £3,704 at 2018/19 prices. Note a different figure is used for home to school transport for those with special needs – see below.
Cost of care proceedings	Per proceeding	£18,574			Taken from Norgrove (2011) Family Justice Review which gives an estimate of £15,000 per proceeding updated to £18,574 at 21/22 prices. Note this is legal costs only and may be an underestimate since legal costs often exceed £30k and LA costs are excluded.
Cost of a young person experiencing depression	Per year	£1,110		£5,137	Unit cost database. Average cost of service provision for adults suffering from depression and/or anxiety disorders, per person per year - fiscal and economic costs.
Cost of treatment for mental health disorders	Per year	£2,496		£5,022	Unit cost database. Average cost of service provision for people suffering from mental health disorders, per person per year.
First time cost of a young offender entering the criminal justice system	One off cost	£4,038			Unit Cost Database taken from NAO 2011. The cost of a cohort of offenders to the criminal justice system.
Lifetime cost of a care leaver becoming NEET	One-off lifetime cost		£271,066	£229,710	Based on Estimating the life-time cost of NEET - University of York for the Audit Commission 2010. Note this is the lowest of several estimates in this study of the lifetime cost of care leavers with different circumstances becoming NEET.
Requiring supported accommodation – LA element	Per week	£138			Taken from "The scale, scope and cost of the supported housing sector" 2016.



Cost/value item	Unit of cost/value	Fiscal cost/ value per unit	Social cost/ value per unit	Economic cost/ value per unit	Source
Requiring supported accommodation  – Housing benefit element	Per week	£101			Ibid.
Cost of residential care for older people	Per week	£3,146			PSSRU as above. Cost of private sector residential care for older people.
Measured improvement in wellbeing	Per year		£13,694		HM Treasury Green Book estimated value of one wellbeing adjusted life year – median value.
Cost of a hospital admission	Per admission	£2,054			Unit cost database estimate based on NHS reference costs 2017/18 for average cost per episode (elective and non-elective admissions).
Cost of removing a child at or near birth - proceedings and assessment costs	Per child	£46,663			One off cost of proceedings to remove a child according to DfE evaluation of PAUSE (Boddy et al 2020).
Cost of removing a child at or near birth – care costs	Per child	£93,911			Lower of two estimated costs of care avoided (based on 4 years avoidance) according to DfE evaluation of PAUSE (Boddy et al 2020)
Difference in costs of a child being 'in Need and being on a Care Protection Plan	Per six months per child	£2,021			Holmes et al 2010 Extension of the cost calculator to include cost calculations for all children in need.
Cost of an offence committed	Per offence	£1,097	£1,578	£1,245	Unit cost database. Average cost per incident of crime, across all types of crime. Analysis carried out by the GMCA Research Team based on 'The Economic and Social Costs of Crime, Second Edition' and assured by the Home Office.



Cost/value item	Unit of cost/value	Fiscal cost/ value per unit	Social cost/ value per unit	Economic cost/ value per unit	Source
Cost of prison	Per year	£41,360			Unit cost database. Average cost per prisoner per annum across all prisons, including central costs. Taken from HMPPS - Cost per place and costs per prisoner 2017-18 (MOJ, 2018)
Cost of a young offender becoming long-term NEET	One-off lifetime cost		£233,588	£157,354	Estimated lifetime welfare cost and lost economic benefit of a young offender who becomes NEET - lower cost case study, University of York 2010 as above. Used only to estimate value in Criminal justice SOCs which specifically target young offenders. Note that the higher cost case (study) not used is > £2m lifetime cost.
Cost of emotional support to a child in school – low level	One-off cost	£166			Unit cost database. Cost of emotional support to a child in school – low level.
Cost of emotional support to a child in school – high level	One-off cost	£4,043		£8,774	Unit cost database.  Total fiscal and economic savings from the delivery of school-based emotional learning programmes, per child over a 10-year period.
Cost of permanent school exclusion	Per year	£12,827		£736	Unit cost database. Permanent exclusion from school - fiscal and economic cost of permanent exclusion from school, per individual per effective year. Taken from Misspent Youth 2007.
Average cost of home to school transport for those with special needs	Per year	£5,814			Based on 2019 Research for the Local Government  Association and the average value of transport by taxi, calculated to be £5,400 at 2018/19 prices. This figure is specific to those with Special Educational Needs and Disabilities (SEND).



Cost/value item	Unit of cost/value	Fiscal cost/ value per unit	Social cost/ value per unit	Economic cost/ value per unit	Source
Cost of a young person under 16 becoming long-term NEET	One-off lifetime cost		£101,563	£42,626	Estimated lifetime welfare cost and lost economic benefit of an under 16 year old becoming NEET - University of York 2010 as above.
Lifetime economic benefit of a Level 2 apprenticeship qualification	One-off lifetime value			£168,876	Marginal Lifetime Benefit of Achieving a Level 2 Apprenticeship compared to anything less for males. Taken from DfE (2014) The economic value of key qualifications.
Lifetime economic benefit of 2 GCSEs	One -off lifetime value			£204,384	Marginal Lifetime Benefit of achieving 2 'Good' GCSEs compared to anything less for males. Taken from DfE 2014 as above.
Lifetime economic benefit of a Level 3 apprenticeship qualification	One-off lifetime value			£209,783	Marginal Lifetime Benefit of Achieving a Level 3 Apprenticeship compared to Level 2 for males. Taken from DfE 2014 as above.
Fiscal and economic benefit of entering work – Job Seeker's Allowance claimant	Per year	£13,944		£19,191	Unit cost database. Fiscal and economic benefit from a workless claimant of Job Seeker's Allowance entering work. Based on unpublished DWP modelling.
Fiscal and economic benefit of entering work – Employment and Support Allowance claimant	Per year	£14,121		£15,811	Unit cost database. Fiscal and economic benefit from a workless claimant of Employment and Support Allowance entering work.
Fiscal and economic benefit of a BTEC qualification	One-off lifetime value	£24,440		£43,480	Unit cost database. BTEC level 2 qualification – lifetime fiscal and economic benefits.
Cost of an A&E attendance	Per attendance	£194			Unit cost database. Estimate of average cost of A&E attendance - investigation with subsequent treatment based on NHS reference costs 2017/18.



Cost/value item	Unit of cost/value	Fiscal cost/ value per unit	Social cost/ value per unit	Economic cost/ value per unit	Source
Cost to a local authority of rough sleeping	Per year	£9,782			Unit cost database. Estimate of the average annual local authority expenditure per rough sleeper sourced from data submitted by local authorities to the Department for Communities and Local Government.
Cost of being statutorily homeless	One off cost	£3,097			Unit cost database. Homelessness application - average one-off and on-going costs associated with statutory homelessness.
Cost of alcohol misuse	Per year	£2,270	£1,763		Unit cost database. Derived from Alcohol Use Disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence (NICE Clinical Practice Guidance 115), p.408.
Cost of drug misuse	Per year	£4,243	£4,478	£10,513	Unit cost database. Derived from Estimating the crime reduction benefits of drug treatment and recovery (National Treatment Agency for Substance Misuse, 2012), p.11; and Drug Treatment Outcomes Research Study (DTORS) (Home Office, 2009), p.13.

Table B.1 – Main costs used in estimating value



## Appendix C - Adherence to Green Book principles

As explained in section 2.3.4 of the main report, in completing this project we have aimed where appropriate and possible to follow the principles set out in the 2022 edition of the 'Green Book'<sup>12</sup>. The part of the Green Book that is most relevant to this exercise is Chapter 5 and most directly in the sections providing guidance on Social Cost Benefit Analysis (CBA) in sections 5.2 of the Green Book.

Where guidance in this part of the Green Book is relevant we have summarised below where and how we have followed it, and where we have diverged from it for a variety of reasons. Numbers in brackets are references to specific subsections and other parts of the Green Book.

Summary of Green Book guidance	Our approach/comment
Social Cost Benefit and Cost Effectiveness Analysis (5.2-5.5)	
Social Cost Benefit Analysis (CBA) assesses the impact of different options on social welfare.	This project is a form of Social CBA, which we have termed cost value analysis.
	Some of the Green Book guidance on Social CBA is not relevant to this project because it is providing guidance on the appraisal of alternative options for future projects and their relative costs and benefits, whereas we are appraising only the costs and benefits of projects that have already been implemented.
Classification of costs (5.10 and Box 12)	
The Green Book advises the following categorisation of	The majority of costs in SOCs are in outcome
costs (though not all appraisals involve every category):	payments made by outcome payers to those managing the contracts. In some cases additional
<ul> <li>total direct public costs (to originating organisation):</li> </ul>	payments are made by outcome payers – for
- capital	example for the management of delivery
- revenue	performance.
<ul> <li>total indirect public costs (to other public sector organisations):</li> </ul>	These costs are all 'direct public costs to the originating organisation' in Green Book terms, and all are revenue costs – there are no capital costs in
– capital	SOCs.
– revenue	Since we are appraising only the cost and benefits of
wider costs to UK society:	projects which have been completed or, if in progress, appraising only the costs (in outcome
<ul> <li>monetisable including cash costs</li> </ul>	payments) and benefits they have achieved to date,
<ul> <li>quantifiable but unmonetisable costs</li> </ul>	there is no need to adjust costs for future risk or for
<ul> <li>qualitative unquantifiable costs</li> </ul>	optimism bias.
<ul> <li>total risk costs (the costs of mitigating or managing risks):</li> </ul>	
<ul> <li>optimism bias (decreased as estimated risk costs are included)</li> </ul>	
<ul> <li>estimated or measured risk cost</li> </ul>	

<sup>&</sup>lt;sup>12</sup> See <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1063330/Green\_Book\_2022.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1063330/Green\_Book\_2022.pdf</a>



### **Summary of Green Book guidance**

#### Classification of Benefits (5.10 and Box 12)

The Green Book advises the following categorisation of benefits in the appraisal of social value (though not all appraisals involve every category):

- direct public sector benefits (to originating organisation):
  - cash releasing benefits
  - monetisable non cash releasing benefits quantifiable but not monetisable benefits qualitative unquantifiable benefits
- indirect public sector benefits (to other public sector organisations):
  - cash releasing benefits
  - monetisable but non cash releasing benefits
  - quantifiable but unmonetisable benefits qualitative unquantifiable benefits
- wider benefits to UK society (e.g. households, individuals, businesses):
  - monetisable including cash benefits
  - quantifiable but not monetisable benefits
  - qualitative unquantifiable costs and benefits

#### Our approach/comment

Our analysis categorises benefits according to whether they are fiscal, social or economic. This approximates to the three main categories advised in the Green Book with fiscal value accruing mainly to the originating organisation, social value to the wider public sector and economic value to individuals.

However some fiscal value accrues to the wider public sector rather than to the originating organisation. For example the fiscal benefits of an SOC creating employment accrue to the DWP which may or may not have been the outcome payer.

We have split fiscal value into cashable benefits and avoided costs which approximate closely to cash releasing benefits, and monetisable non cash releasing benefits, but have not similarly split social or economic value.

Our analysis includes only wider value to individuals (through enhanced earnings) and excludes most wider benefits to society – e.g. we have excluded the benefits to communities and businesses of reduced offending leading to crime, and included only the direct public value created by reduced offending.

#### Adjustments for inflation (5.11 - 5.15)

Costs and benefits in appraisal of social value should be estimated in 'real' base year prices by applying the "GDP deflator" from the most recent forecasts by the Office for Budget Responsibility (OBR).

Costs have not been adjusted for inflation because we are not forecasting future costs. Outcome payments do not generally increase with inflation (and if they have been inflated, such increases will already be included in the data provided to us and no further adjustment is needed).

Benefits have been adjusted for inflation – especially historic costs/values used to calculate value created from research sources which were converted to current prices using the latest available (March 2021) GDP deflator.

#### Discounting and Social Time Preference (5.32 – 5.37)

Discounting should be applied to all future costs and benefits [...] based on the concept of time preference – that generally people prefer to receive goods and services now rather than later.

To achieve this a Social Time Preference Rate (STPR) should be applied. The STPR used in the Green Book is set at 3.5% in real terms, with exception for risk to life values which use a lower rate of 1.5%. (See Appendix A for full definition of the STPR).

As explained above there are no future costs in our analysis and therefore we have not applied the STPR to them. We have applied the recommended STPR of 3.5% to future benefits where applicable, though since we have assumed very little sustainment of value in the longer term the adjustment for STPR is lower than in a value case which was projecting the future value of an SOC over multiple contract years. In addition, the long-term cost value estimates used in our analysis (see Appendix B) are already adjusted to Net Present Value using the STPR in the source literature.



## **Summary of Green Book guidance**

Optimism bias (5.43 - 5.46)

# There is a wide range of uncertainty that affects interventions, but in appraisal it is often due to lack of outdoors or understanding of the likely impact of new

evidence or understanding of the likely impact of new interventions.

Optimism bias is the demonstrated systematic tendency

Optimism bias is the demonstrated systematic tendency for appraisers to be over-optimistic about key project parameters, including capital costs, operating costs, project duration and benefits delivery

To reduce this tendency appraisals should make explicit adjustment for optimism bias. The Green Book recommends applying overall percentage adjustments at the outset of an appraisal.

#### Risk (5.47 - 5.52)

Risk management is defined as a structured approach to managing risks that are identified and assessed when designing an intervention or that materialise later in its lifecycle.

To optimise social value, risk must consciously and proportionately be managed.

#### Summary measures of social welfare (5.54 – 5.56)

A variety of measures can be used to summarise Social CBA. Estimates of Net Present Social Value (NPSV) and Benefit Cost Ratios (BCR) are commonly used:

NPSV is defined as the present value of benefits less the present value of costs. It provides a measure of the overall impact of an option, including any changes in public spending.

BCR is defined as a ratio of the present value of benefits to the present value of costs. It provides a measure of the benefits relative to costs.

#### Preferred option selection (5.53)

Preferred option selection starts from a comparison of the alternative options in the shortlist relative to Business As Usual (BAU).

#### Our approach/comment

A proportion of the risk of optimism bias is eliminated from our analysis because many of the outcomes we are valuing (e.g. care avoided or employment created) are the results of known impact delivered through SOCs. Thus the risk of 'lack of evidence or understanding of the likely impact of new interventions' is not a factor.

The main risk of optimism bias is in predicting the future value of what we have termed consequential outcomes. As explained in detail in section 2.3.5 of the main report, we have sought to avoid this by making consistently conservative assumptions about the scale and value of such outcomes, rather than making a specific adjustment for possible optimism bias.

Not applicable to this analysis which is not assessing the risk of future projects.

We have used both NPSV and BCR to summarise Social CBA in this report and have done so in accordance with Green Book guidance on the application of adjustment for inflation, and discounting using the STPR, as already outlined above. We have estimated NPSV and BCR both overall and at sector level where possible.

We have not been able to estimate NPSV and BCR in the Criminal Justice Sector due to the absence of cost data – see section 3.7.

This and subsequent sections of Chapter 5 of the Green Book have not been applied to this analysis because they are relevant only to the appraisal of future options, rather than of past projects. We have thus ignored the guidance relating to Sensitivity analysis, Equalities analysis, Distributional analysis and subsequent sections.



## Appendix D – Main assumptions: Child and family welfare

Table D.1 below provides more details of the main calculations and assumptions made to estimate value in the Child and family welfare sector. The table shows:

- The outcome cost avoided or value created through the SOCs.
- Whether the outcome cost or value is Direct or Consequential. Please see section 2.2.6 of the main report for definitions of these. A direct outcome is almost certain to have occurred due to outcomes directly measured by the SOC Rate Card or payment mechanism. Consequential outcomes require assumptions about future costs avoided or value created that can be inferred from Direct outcomes.
- Rationale/theory of change. Brief explanation for the logic or theory of change that lies behind inclusion of the outcome especially consequential outcomes.
- Explanatory comments. Additional detail as required especially where we have made assumptions about the prevalence of an outcome or causative
  link between direct and consequential outcomes i.e. what proportion of those achieving a direct outcome might be expected to also experience or
  avoid a consequential outcome.

We list outcome costs and values by the project groups described in the main report (i.e. Residential Step down projects, then Avoidance of care projects etc.) with a summary rationale/theory of change for each group where appropriate, but note that we have not repeated outcomes or their rationale if they apply to more than one group in each sector.

For projects in the 'Other' group in each sector we have provided details only of key outcomes which drive a significant proportion of value.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Residential care 'step-down'	projects	Therapeutic interventions funded by SOCs support children or young people (CYP) in residential care to move or 'step down' to foster care	Interventions such as Multidimensional Treatment Foster Care (now known as Treatment Foster Care Oregon) are typically used. Interventions are also known as 'intensive fostering' because the CYP require more support than a typical foster placement, though support tends to reduce over time.
Child or young person in residential care steps down to foster care for a specified period	Direct	This is the primary outcome of 'step down' SOCs, measured either in number of weeks of step down achieved or sustainment of step down for defined sequential periods (e.g. 6 months, 12 months etc).	We have assumed a saving only for the period of step down actually measured and paid for by the SOC, converted to weeks, with no further sustainment assumed. Costs saved/avoided per week are the difference between residential and fostering costs. Fostering costs are higher (and so savings lower) than those assumed for avoidance of care projects because fostering is more intensive.
Child or young person who steps down avoids becoming long-term NEET	Consequential	Consequential adverse outcomes avoided are less likely in step down than in avoidance of care projects because the child is still in care, but there is some evidence from DfE research (Hart et al, 2015: The place of residential care in the English child welfare system) that CYP In residential care do have worse outcomes than in foster care, especially in terms of becoming long-term NEET; experiencing mental health issues, notably depression; and being liable to offend and be In the criminal justice system.	Given the likely lower incidence of consequential outcomes avoided, we have assumed that adverse outcomes will be avoided only if step down is sustained for more than 12 months (41% across these SOCs to date) and have assumed low impact even on this cohort – in the case of NEET avoidance 20% based on evidence in Dregan A, Gulliford MC (2012) "Foster care, residential care and public care placement patterns are associated with adult life trajectories". Value from these and other outcomes below is also estimated at low confidence.
			Here and subsequently the avoidance of becoming long-term NEET has both social and economic value and varies by cohort. In this case the cost is for a 'lower cost' care leaver – rather than an alternative 'higher cost' figure – see Appendix B.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Child or young person who steps down avoids depression or mental health issues	Consequential	See above	See above. Impact for those with >12 months sustainment assumed to be 30% for depression and 15% for more serious mental health issues based on Dregan and Guilford 2012 and Lee et al (2010): Child welfare group care literature review.
Child or young person who steps down avoids entry to the criminal justice system or prison	Consequential	See above	See above. Impact for those with >12 months sustainment assumed to be 50% for entry to the system and 10% for prison based on Dregan and Guilford 2012
Avoidance of care projects		Therapeutic interventions funded by SOCs prevent CYP entering local authority care or reunify those already in care with their family or other carers.	Evidence-based 'high-fidelity' interventions such as Multi- systemic Therapy or Family Functional Therapy are typically used, along with more bespoke interventions.
Child avoids entering care or returns home	Direct	This tends to be the primary outcome of these SOCs, with the paid outcome usually being the number of days or weeks of care avoided, sometimes with an initial payment after a defined number of weeks.	We have assumed a saving only for the period of care avoided as measured and paid for by the SOC, converted to weeks, with no sustainment assumed beyond validated outcomes. Costs saved/avoided per week are a mix of residential and fostering costs and we have assumed 14% residential and 86% fostering, in line with national data on prevalence. We have used average fostering costs as a proxy for what in practice is likely to be a complex mix of placements with varying costs.
Pupil premium no longer payable	Direct	This is a direct outcome of care avoidance because the pupil premium is paid automatically for every student who is looked after.	Assumed to apply to all those avoiding care/reunified and at 100% impact because payment is automatic and universal.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Support to CYP on leaving care	Direct	Support is provided to all those leaving care by the respective Children's Services Authority, usually through the advice and support of a Personal Advisor (PA).	There is no standard cost for care leaver support which varies greatly. We used the actual costs incurred by a Council which is the outcome payer for one of the SOCs in this group and analysed by ATQ as part of a more detailed value case developed for that project. This derived a cost per person of £7,000.
Cost of care proceedings avoided	Direct	Every child taken into care through statutory proceedings will incur these costs so they are a Direct outcome if proceedings are needed.	We have assumed the prevalence of cases requiring proceedings to be in line with the national average which DfE statistics show to be 79% of all placements (20/21), although it will vary by project. Costs are from Norgrove (2011) – see Appendix B.
Specialist transport costs avoided	Consequential	According to 2019 Research for the Local Government Association (Swords et al: Understanding the drivers for rising demand and associated costs for home-to-school transport) a growing number of Looked after Children (LAC) are entitled to free Home to School transport, especially if they move placement.	No robust data on prevalence but based on research for the value case for a specific SOC referred to above we estimate that 30% of those in care require home to school transport (and would not have done so prior to care). Costs are based on the referenced LGA research (see Appendix B).
YP passes English and Maths GCSEs	Consequential	LAC are much more likely to fail English and Maths than other CYP According to DFE statistics the attainment gap is 31%.	Despite the high attainment gap we have assumed low impact of 10% in line with local research which showed LAC often do as well as other children depending on placement.
YP avoids becoming long-term NEET on leaving care	Consequential	Care leavers are much more likely to be NEET than other CYP. According to DfE statistics 41% of care leavers aged 19-21 were NEET in 2020/21.	We have summed that avoidance of care will reduce the number becoming long-term NEET by 20% as a result both of avoiding care and the support they receive from therapeutic intervention.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Requiring supported accommodation	Consequential	Those who have been looked after tend to be more likely to require supported accommodation although the proportion is variable.	We have estimated that avoidance of care will reduce the need for supported living by 38%, based on local research for the value case referred to above. However the proportion varies widely and we have estimated value at low confidence.
YP is less likely to offend or go to prison	Consequential	There is good evidence that the proportion of those who in the criminal justice system who were in care is high and currently around 25%. According to DfE Statistics (2020/21) 5% of care leavers age 17 were in custody.	While there is good evidence of correlation between care and offending there is less evidence for causation i.e. that being in care increases offending risk such that care avoidance can reduce it. We have therefore made cautious assumptions about both impact on offending (10%) and imprisonment (1%). We have also estimated value at low confidence.
Care leavers projects		The objective of this group of projects (funded by DfE) was to enable care leavers to achieve employment, education and training (EET) outcomes with the aim of them avoiding becoming long-term NEET.	See Appendix A and links for further details of these projects. The majority of outcomes achieved are direct outcomes — mainly qualifications and employment. The main consequential outcomes are reduced risk of long-term NEET (a primary objective of the programme) plus some reduced risk of offending and improved wellbeing.
Care leaver achieves a level 2 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes valued solely on economic lifetime value and assuming they are level 2 apprenticeship qualifications. Note that other training outcomes that are part of this Rate Card (except level 3 qualifications below, and a small number proceeding to higher education) were excluded from our analysis.
Care leaver achieves a level 3 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes measured on lifetime marginal value compared to level 2 qualifications. Since we used the marginal additional value there is no risk of double counting of value for those who achieved both level 2 and level 3 outcomes.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Care leaver sustains employment	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	Employment is rewarded through the Rate Card on a tariff which varies according to the economic value and length of the employment. These outcomes were converted into months of employment at living wage. These were then valued for both fiscal and economic benefit using costs shown in Appendix B. Note that we have assumed no sustainment of employment beyond that evidenced directly by outcome metrics.
Care leaver avoids becoming long-term NEET	Consequential	Although this was the primary objective of these projects it was not measured directly, but it is reasonable to assume that a proportion of those sustaining work will avoid becoming NEET.	It is difficult to predict this outcome without long-term tracking and we have assumed that those sustaining at least six months employment (73 of the cohort) will achieve this outcome.
Care leaver improves well- being	Consequential	A further key objective of these projects was to improve the wellbeing of the care leavers and some proxy measures of wellbeing – notably 'feeling safe' were directly measured through the Rate Card. A key assumption was also that EET outcomes would themselves improve wellbeing.	We have assumed that all those self-measuring as 'feeling safe' will achieve six months improvement in wellbeing, but at low confidence., Those achieving this outcome and entering employment for the equivalent of six months were assumed to improve wellbeing for one year, at medium confidence.
Care leaver less likely to offend or be in prison	Consequential	Not directly measured under the Rate Card but it is reasonable to assume some modest reduction in offending and imprisonment risk due to all round improvements in confidence, skills and economic resilience.	Assumed that 10% of those benefiting from the programme will reduce low level offending and 1% will avoid prison – in line with assumptions made for care leavers generally as described above.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Other projects		See details below of key outcomes for each project included in this group and how we have estimated value.	
PAUSE projects – reduction in removals of children	Consequential	These projects deploy the PAUSE intervention which involves working with vulnerable women "at risk of becoming pregnant and having a child taken into care". The key consequence of its success is that there are fewer unwanted pregnancies and fewer removals of children at birth. Such removals have huge costs which are avoided if removals are reduced.	The number of future removals avoided cannot be observed directly and we have relied heavily in valuing these projects on an independent DfE evaluation (Boddy et al 2020) which showed that each project led to a reduction of 14.2 removals per local authority, compared to a comparison group of similar authorities. We have used this figure to estimate value for these SOCs, which cover four LAs. Costs per removal avoided are taken from the same evaluation – see Appendix B.
PAUSE projects – improved outcomes for mothers	Consequential	The way PAUSE works with women also improves outcomes for them including improved mental health and wellbeing, improved physical health and reduced worklessness/long-term NEET.	Improved outcomes for women are identified in the DfE evaluation but not valued. The evaluation does however contain good data on the prevalence of adverse outcomes among the cohorts studied, and the impact of PAUSE on them. We have used this data to estimate the likely impact on mothers in the SOCs but have assumed improved outcomes only for those successfully completing the programmes rather than all those entering them and part completing.
Integrated family support service – reduction in escalation from Child in need	Direct	The main outcome of this project is the same as avoidance of care projects above – the prevention of a child entering care for a defined period. It differs from them in having an additional outcome of preventing a Child in need (CiN) escalating to being on a Child Protection Plan (CPP). This is a direct outcome because measured directly and validated under the rate card.	The main outcome of prevention of care has been valued directly (see avoidance of care projects above) based on weeks of care avoided, reduced pupil premium and reduced cost of care proceedings.  The additional de-escalation outcome has been valued based on the actual number achieving it according to project data and the difference in cost between managing a CiN and a CPP – see Appendix B.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Norfolk Carers Partnership (AKA Norfolk SIB for carers) – reduced entry to residential care and reduced hospital admissions	Consequential	This SOC aims to improve support for those caring for adults (mainly older people) and a key objective is to reduce the number of care breakdowns leading to an older person needing to go into residential care. This is therefore a consequential outcome rather than observed and measured directly through the SOC.	We have valued this and some other outcomes from this project based on a more detailed value case that we undertook for this specific project in 2019/20. We have reworked calculations based on actual outcomes achieved to date rather than forecast outcomes.  The main outcome (residential care avoided) has been valued based on the average weekly cost of residential care of older people – see Appendix B.

Table D.1 – Main assumptions in the Child and family welfare sector



## Appendix E – Main assumptions: Education

Table E.1 below provides more details of the main calculations and assumptions made to estimate value in the Education sector. Please see Appendix D above for an explanation of column headings.

We list outcome costs and values by the project groups described in the main report (i.e. School readiness/attainment projects, then School readiness/attainment projects.) with a summary rationale/theory of change for each group.

Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
School readiness/attainment projects		The projects in this group have different outcomes but sit within a group of SOCs that aim to improve outcomes for children pre-school or while in school in the expectation of both short- and longer- term improvements in life chances.	Nearly all outcomes in this group are consequential because we are forecasting future outcomes, often some years ahead. This affects the confidence we have in our estimates and many are at low or at best medium confidence.
Reduced in-school costs due to children being school ready and closing the attainment gap	Consequential	There is substantial evidence that children who are not 'school ready' or fall behind while at school have worse outcomes in both the short and long term. All the projects in this group address this to a varying extent and in different ways — with one aiming to work pre-school to make children school ready and the others aiming to improve in-school attainment and other factors — such as attendance and behaviour.  Improvements in school readiness and closure of the attainment gap create short-term value by reducing the cost for schools of remedial support.	Calculating the value created by improved school readiness is complex and we have relied on previous detailed value cases that ATQ undertook for two of the projects in this group and the research we conducted in developing those cases. This enables us to make reasonably accurate estimates of the number of children impacted through the SOCs and assign a value to that improvement from reduced remedial costs. The cost calculation requires assumptions about the cost per student and the number of years they are in school after intervention (which varies by project and cohort). We then adjusted these estimates for inflation and social time preference.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Reduced costs of other support	Consequential	Some of these projects work intensively with students in school and are likely to reduce their need for other emotional support. It is also reasonable to assume a reduced need for parenting support.	Based on the previous value case we undertook and research behind it we have made assumptions about value created through a likely reduction in the need for both low and high level emotional support, and in parental support through parental support programmes,. See Appendix B for costs used.
Fewer children permanently excluded	Consequential	Intensive work with children is likely to reduce the risk that some of them will be permanently excluded from school.	We have made a modest assumption that a few permanent exclusions will be avoided based on previous analysis. The number is low because permanent exclusions are not widely used, so any impact will be minimal.
Fewer children are in need and eventually become looked after	Consequential	Since the largest of these projects works with children and their families both in school and in the community there is likely to be a small impact on wider family functioning and a reduction in children becoming in need or in care. The effect will likely be limited to older children who tend to go into care under voluntary arrangements and the effect on younger children – most of whom become looked after due to abuse or neglect – will be negligible.	Valued based on very conservative assumptions about both liability to become in need (6%) and to avoid care (2%) and the length of any care avoided. See Appendix B for care costs used.
Fewer children become long- term NEET	Consequential	Both pre-school support to improve school readiness and in-school support to improve attitude and attainment might be expected to have a small effect on the incidence of children becoming long-term NEET.	Assumed that a small proportion of those supported through these projects (4%) will avoid becoming long-term NEET. As in other projects this creates both social and economic value, but we have valued using the costs of becoming long-term NEET for a child under 16 – see Appendix B.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
More young people obtain a level 2 qualification – level 2	Consequential	It is also reasonable to assume that improvements in school behaviour etc. will feed into some improvement in qualifications at Key stages 3 and 4. These are consequential outcomes under these projects rather than directly measured as in some other projects. We have assumed modest improvements in both level 2 qualifications and in the gaining of two GCSEs (see below).	In view of the lag and between support and outcome and the fact that these are consequential outcomes rather than directly measured we have assumed only modest impact (10% of those school ready) at medium confidence. We have valued qualifications as level 2 apprenticeships – see Appendix B.
More qualifications obtained – two GCSEs	Consequential	See above	As above but assuming 2 GCSEs rather than a level 2 apprenticeship. We assumed that 5% of those who are 'school ready' would achieve this outcome at medium confidence. See Appendix B for lifetime value of 2 'good' GCSEs.
Travel training projects		These projects are a single family which aim to enable children with Special Educational Needs and Disabilities (SEND) to travel independently to school using public transport rather than in specialist transport funded by the local authority.	
Child with SEND is able to travel independently	Direct	This is the primary measured outcome of these projects. It creates value for the outcome paying LAs because they can reduce the costs of specialist transport – usually by taxis or minibus.	The costs of transport avoided or saved vary greatly depending on the school journey, type of transport used and whether it is shared with other students. We have used the average costs of home to school transport for those with SEND derived from 2019 Research for the Local Government Association (Swords et al: Understanding the drivers for rising demand and associated costs for home-to-school transport). See Appendix B.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Improved wellbeing	Consequential	Wellbeing is not a direct, measured outcome under these SOCs but government guidance (e.g. DfT 2011, DfE 2014) on independent travel training notes the effect of independence on confidence, improved selfesteem, well-being, and quality of life. It is therefore reasonable to assume some improvement in wellbeing.	We have assumed an improvement in wellbeing (average two years) for 20% of those able to travel independently as a result of these SOCs.

Table E.1 – Main assumptions in the Education sector



## Appendix F – Main assumptions: Employment and training

Table F.1 below provides more details of the main calculations and assumptions made to estimate value in the Employment and training sector. Please see Appendix D above for an explanation of column headings.

We list outcome costs and values by the project groups described in the main report.

Except for the MHEP group there is significant similarity and overlap between main outcomes and therefore values from SOCs in this sector.

Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Youth Engagement Fund projects		The projects in this group were funded by central government (mainly DWP) and aimed to 'help disadvantaged young people aged 14 to 17 to participate and succeed in education or training. This will improve their employability, reduce their long-term dependency on benefits, and reduce their likelihood of offending'.	Many outcomes that create value are directly measured by these SOCs and we can therefore predict value with medium – high confidence.
Young person achieves a first level 2 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes valued solely on economic lifetime value and assuming they are level 2 apprenticeship qualifications. Note that we excluded other training outcomes that are part of this Rate Card (except level 3 qualifications below) from our analysis.
Young person achieves a first level 3 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes measured on lifetime marginal value compared to level 2 qualifications. Since we used the marginal additional value there is no risk of double counting of value for those who achieved both level 2 and level 3 outcomes.
Young person is employed for 26 weeks	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	Valued for both fiscal and economic benefit using costs shown in Appendix B. Note that we have assumed no sustainment of



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
			employment beyond the 26 weeks/six months that is evidenced directly by the outcome metrics.
Young person avoids becoming long-term NEET	Consequential	Not measured directly, but it is reasonable to assume that a proportion of those sustaining work will avoid becoming NEET.	It is difficult to predict this outcome without long-term tracking and we have assumed that those sustaining at least six months employment (3% of the total cohort supported) will achieve this outcome.
Young person improves well- being	Consequential	Not measured directly but reasonable to assume that those entering employment will experience a modest improvement in wellbeing.	We have assumed, at low confidence, that those entering employment (6% of the cohort) will improve wellbeing for an average of one year. We have made no assumption about improved wellbeing for those achieving qualifications.
Mental Health and Employment Partnership (MHEP) projects		MHEP SOCs were/are a single family which deploy(ed) the individual placement and support (IPS) intervention to support those with mental health issues to find and sustain employment.	MHEP projects have similar but not identical outcomes and Rate Cards. The family includes one project which had additional outcomes and deployed a slightly different IPS intervention to support those with addiction issues.
Service user sustains employment	Direct	Entry to employment and its sustainment for 6, 13 or 26 weeks are measured directly under MHEP Rate Cards.	Valued based on actual periods of employment achieved according to Rate Card metrics and based on the fiscal and economic values shown in Appendix B, assuming the service user was in receipt of Employment and Support Allowance.
Service user improves wellbeing (mental health projects)	Consequential	Improving wellbeing was an expected outcome of employment across these projects which were commissioned by local authorities and CCGs on the assumption that here would be improvements in mental health and reductions in need for mental health support.	We have assumed an improvement in wellbeing for one year, at medium confidence, but only for those entering and sustaining employment for at least three months.
Service user improves wellbeing (Addictions project)	Direct	Service users in the MHEP Addictions project have improvement measured directly through the	Assumed that those achieving a TOP score improvement of more than 2 points will improve their wellbeing for two years.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
		Treatment Outcomes Profile (TOP) tool. The SOC pays for those improving their TOP score by 2 points or more.	
Reduction in social care and other health costs	Consequential	The theory of change behind MHEP also presumed some modest reduction in demand for mental health and other social services.	We have assumed that each service user who enters employment will on average reduce social services demand by five hours, at a cost/value of £46 per hour.
DWP Innovation Fund Projects		The projects in this group were funded by central government (mainly DWP) and aimed to support disadvantaged young people by helping them participate in education and training to improve their employability'.	The Innovation Fund was a predecessor to the YEF (see above) and had similar employment and training outcomes.
Young person achieves a level 2 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes valued solely on economic lifetime value and assuming they are level 2 apprenticeship qualifications.
Young person achieves a level 3 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes measured on lifetime marginal value compared to level 2 qualifications.
Young person achieves three months or six months employment	Direct	Both three and six months employment Outcome directly measured and paid for under the Rate Card for these projects.	Valued for both fiscal and economic benefit using costs shown in Appendix B. No sustainment of employment assumed beyond the 3/6 months directly evidenced.
Young person avoids becoming NEET	Consequential	Avoidance of becoming NEET was an explicit objective of the Innovation Fund especially by improving in-school outcomes for those aged 14-16.	Assumed that 5% of those achieving the 'improved behaviour' outcome (1.9% of total cohort) will avoid becoming NEET.  Avoidance value based on cost of an under 16 year old becoming long-term NEET – see Appendix B.

Table F.1 – Main assumptions in the Employment and training sector



## Appendix G – Main assumptions: Health

Table G.1 below provides more details of the main calculations and assumptions made to estimate value in the Health sector. Please see Appendix D above for an explanation of column headings.

We list outcome costs and values by the project groups described in the main report, and then by 'Other' projects.

Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Health management projects		The projects in this group are not identical or part of a single family but all use social prescription or similar link-worker based interventions to support people to better manage health conditions such as Type 2 Diabetes, and improve wellbeing.	These projects create value through improved wellbeing, and through consequential reductions in demand for NHS services – both primary care and recued hospital treatment and admission.  Note that both the scale of these projects and the conditions that they help manage are different, requiring bespoke assumptions about impact and value.
Service user improves their wellbeing	Direct	Improved wellbeing is directly measured and paid for under the Rate Card for one of these projects, using the Wellbeing Star™.	We have assumed wellbeing improves for one year, at medium confidence, but only for the project where it is measured directly and only for those who have a measured improvement in wellbeing of more than one point for 12 months.
Fewer hospital admissions	Consequential	Better management of conditions will mean fewer hospital admission (planned and unplanned).	Estimating the consequential impact on health service demand of better self-management is complex and varies by condition. We based our assumptions on a detailed value case that we prepared for commissioners of one of the projects in this group prior to its implementation. This drew on several research sources which provided evidence of the impact on services of different conditions.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
			Value estimates are based on the average cost of a hospital admission – see Appendix B, and data from our previous research on the number of admissions likely to be avoided by better management of different conditions.
Service user reduces their demand on primary care	Consequential	Better management of conditions will mean fewer GP visits/consultations per year.	See above for how we estimated likely impact on service demand based on previous research. Costs are based on an assumed reduction in demand for telephone-based consultation including prescription (£60 per consultation) and data showing an average reduction in demand of seven consultations per year.
End of Life Care (EOLC) projects		These projects are part of a single family but have different outcome metrics for each contract. They aim to improve the care of people who are nearing the end of their lives and enable them to die at home or in the place of their choosing. Incidentally they also reduce hospital and other care costs by so doing.	These SOCs are unusual in measuring the fiscal value they create directly and paying the provider a proportion of that value. We can therefore calculate the fiscal value created with high confidence because it is based directly on the outcome metrics, which vary by project as outlined below.
Reduction in non-elective admissions	Direct	Two of the projects in this group pay directly for a reduction in unplanned hospital admissions at an agreed value.	See above. Values taken directly from project data. Note values of non-elective admissions vary by project and are not the same as average costs used to estimate the value of admissions avoided by other SOCs as included in Appendix B.
Reduction in unplanned hospital bed days	Direct	One of the projects in this group pays directly for an agreed reduction in the value of bed days avoided.	See above. Values taken directly from project data.
Increase in number of people dying in their usual place of residence	Direct	One of the projects in this group pays an agreed amount reflecting the value of someone dying at home rather than in hospital or LA care.	See above. Values taken directly from project data.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Other projects		See details below of key outcomes for each project included in this group and how we have estimated value.	
Reconnections	Consequential	This SOC aimed to reduce people's loneliness, and measured loneliness directly using an internationally recognised scale.	Estimating the value of reduced loneliness is complex but there is strong evidence that reduction improves wellbeing and we therefore used welling as a proxy for other potential outcomes (e.g. improved health). We assumed at medium confidence an improvement in wellbeing for one year, but only for those showing evidence of sustained reduction in loneliness score at 18 months.
Zero HIV SIB (Elton John AIDS Foundation)	Direct	This SOC aimed to identify people living with HIV and engage or re-engage them in treatment, paying directly for each person (re)engaged. This has substantial value in reduced treatment costs for the individual and also from the reduced transmission of HIV to other people.	Research in 2016 identified the total saving from a person being in HIV treatment at £360 k but we used a lower figure which was developed by McKinsey working for the Elton John AIDS Foundation. This calculated the benefit to the NHS of early diagnosis and treatment (i.e. cost of illness/delayed treatment net of the cost of early treatment) at £140,000 per person, plus a further £80,000 per person in reduced onward transmission.
Promoting Independence	Direct	This SOC provides support to enable people with mental health needs to live independently, thus reducing the costs of their previous care.	The project measures sustainment of independent living for 6 and 12 months and we have valued care avoidance based solely on outcomes achieved, with no further sustainment assumed. Values are based on the cost of residential care for an adult with mental health needs – see Appendix B.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Cornwall Frequent Attenders	Direct	This project intervenes with Cornwall residents aged 18+ with a substance misuse issue who have had eight A&E attendances/two hospital admissions in a year. It measures reductions in attendances through the Rate Card.	Since reduced attendances are measured directly we have valued them with high confidence based on the average cost of an A&E attendance and of a hospital admission, as set out in Appendix B.

Table G.1 – Main assumptions in the Health sector



## Appendix H – Main assumptions: Homelessness

Table H.1 below provides more details of the main calculations and assumptions made to estimate value in the Homelessness sector. Please see Appendix D above for an explanation of column headings.

We list outcome costs and values by the project groups described in the main report.

There is significant similarity and overlap between main outcomes and therefore values from SOCs in this sector.

Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Entrenched rough sleeping projects		All the projects in this group aimed to address 'Entrenched Rough Sleeping'. The theory behind them is that support to people who are sleeping rough will enable them to enter accommodation and then progress to employment, as well as addressing other issues including substance misuse and poor mental health SOCs were commissioned locally but funded by MHCLG (now DHLUC). They have an identical or very similar Rate Card.	There are numerous outcomes measured directly through the Rate Card for these projects and it is therefore possible to estimate value created with greater confidence than in some other projects.  In valuing these projects we have drawn on a more detailed value case that we developed for one of the projects in this group, which enabled us to estimate the prevalence of issues and likelihood of impact based on more detailed research relating to a representative cohort.
Service user enters and sustains accommodation	Consequential	Projects in this group directly measure the length of time that a user remains in accommodation. This means they are no longer rough sleeping, which most would have been prior to entering the programme, Where not rough sleeping, they would have been at imminent risk of rough sleeping.	We converted the total months of accommodation sustained into an average number of months per person achieving accommodation outcomes, and then made an assumption from that of reduced rough sleeping (based on likely prevalence prior to entry). Prevalence was based on detailed research undertaken for the previous value case referred to above. We then converted the months of rough sleeping avoided to value based on the average fiscal costs of rough sleeping — see Appendix B.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Reduced drug and alcohol dependency	Consequential	These projects directly measure and pay for entry and sustainment of treatment for drug and alcohol misuse. It is therefore reasonable to infer that there will be some impact on dependency costs in the medium term.	We have assumed (at low confidence) that those who sustain treatment will have lower treatment costs compared to those who do not enter treatment. Value is based on the avoidance for two years of the treatment costs shown in Appendix B.
Improved wellbeing	Consequential	These projects directly measure and pay for sustained treatment for mental health issues. We have assumed that those sustaining such treatment are likely to show some improvement in wellbeing, although wellbeing is not directly measured.	Assumed at medium confidence that those sustaining mental health treatment will improve wellbeing for one year.
Entering and sustaining employment	Direct	Projects measure sustainment of both part-time and full-time employment.	We have converted all employment claimed under the Rate Cards to months of employment and then valued these on the same basis as other projects – see Employment and Training projects, Appendix F.
Reduction in minor offending	Consequential	Those rough sleeping are known to be at higher risk of offending and some reduction in offending is likely once service users are no longer sleeping rough and are addressing other issues.	Some minor reductions assumed – at low confidence – based on research for previous value case into prevalence of previous offending prior to entry to programme. Value based on average cost per incident of crime – see Appendix B.
Reduced imprisonment	Consequential	As above.	Some reduction assumed – research for the previous value case showed that 6% of the cohort were in prison prior to referral to the programme and we have used this to estimate prevalence.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Fair Chance Fund projects		All the projects in this group aimed to address homelessness and other issues among young people. Seven of the projects were funded by the DCLG (now DHLUC) through the Fair Chance Fund FCF) and the other used the FCF rate card (both outcomes and payments).	FCF outcomes have much overlap with the Entrenched Rough Sleeping (ERS) SOCs but fewer outcomes were measured through the Rate Card and we have therefore inferred fewer consequential outcomes, and made different/lower assumptions about prevalence e.g. of rough sleeping.
Young person enters and sustains accommodation	Consequential	Projects in this group directly measure the length of time that a user remains in accommodation, using similar metrics to those used for the ERS projects, but the likelihood of a service user sleeping rough prior to the programme (or risk of them sleeping rough) was lower.	We converted the total months of accommodation sustained into an average number of months per person as for the ERS projects, but made lower assumptions about prevalence and therefore the impact on rough sleeping.
Young person achieves a level 2 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes valued solely on economic lifetime value and assuming they are level 2 apprenticeship qualifications.
Entering and sustaining employment	Direct	Projects measure sustainment of both part-time and full-time employment.	We have converted all employment claimed under the Rate Cards to months of employment and then valued these on the same basis as other projects – see Employment and Training projects, Appendix G.
Reduction in minor offending	Consequential	It is reasonable to assume some reduction in offending once service users are in settled accommodation and addressing other issues but we should be cautious about both prevalence of previous offending and likelihood of reduction due directly to the intervention.	Some minor reductions assumed – at low confidence – and based on similar prevalence levels to ERS projects. Prior offending likely to be lower and future avoidance potentially higher, but both are difficult to estimate.
Reduced imprisonment	Consequential	As above.	Some minimal reduction assumed at low prevalence and at low confidence.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Single Homelessness Prevention projects		The theory of change behind these projects is that single people who are at risk of homelessness can avoid the outcome if issues likely to lead to homelessness – e.g. risk of eviction – are addressed earlier and with more support.	There is some overlap with other homelessness projects in terms of outcomes but these SOCs are earlier stage and preventative and therefore assumed prevalence and future outcomes avoided are much lower. All estimates are at medium or low confidence. There are also additional outcomes relating to the avoidance of homelessness which has its own costs and value as below.  Prevalence assumptions were based on a previous value case undertaken for these projects by ATQ, drawing on actual data from one project – see assumptions below. Costs etc have not been repeated if the same as those assumed for FCF and ERS projects above
Single person avoids statutory homelessness	Direct	Measured directly under the Rate Card for these projects.	Assumed that 50% of the cohort would otherwise have been homeless and 10% will avoid this outcome due to the SOC intervention. See Appendix B for costs of statutory homelessness.
Single person avoids rough sleeping	Consequential	A small proportion of those who avoid homelessness will also avoid rough sleeping for a short period.	Assumed that 20% will end up rough sleeping for an average of 12 weeks. Costs as for ERS and FCF projects above.
Single person avoids becoming NEET	Consequential	A proportion of those who avoid homelessness will also avoid becoming long-term NEET.	Assumed that 20% might otherwise have become NEET and that 8% will avoid this outcome due to the intervention, so net impact of 1.6% on total cohort.
Single person gains employment	Consequential	A proportion of those who avoid homelessness will also be supported to enter employment.	Assumed prevalence of worklessness of 65% prior to intervention and that 10% will avoid worklessness and gain employment for one year.



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Single person avoids offending/imprisonment	Consequential	Assumed that the intervention will enable a small reduction in minor offending and an even smaller reduction in offending leading to imprisonment.	Assumed 10% prevalence of minor offending and 5% prevalence of prison, and 20% impact due to intervention.
Other projects		The other projects in his group all have similar objectives – to reduce homelessness and in particular rough sleeping, and one closely follows the ERS Rate Card.	Outcomes and prevalence are similar to assumptions for ERS projects and impact based directly on outcome achievement. Main outcomes are summarised below.
Service user enters and sustains accommodation	Consequential	Projects directly measure the length of time that a user remains in accommodation with implications for the avoidance of rough sleeping.	Total months of accommodation sustained converted into an average number of months per person and then into an assumed avoidance of rough sleeping – see ERS and FCF projects above.
Young person achieves a level 2 qualification	Direct	Outcome directly measured and paid for under the Rate Card for these projects.	All outcomes valued solely on economic lifetime value and assuming they are level 2 apprenticeship qualifications.
Entering and sustaining employment	Direct	Projects measure sustainment of both part-time and full-time employment	All employment converted to months of employment and valued these on the same basis as other projects – see Employment and Training projects, Appendix G.
Reduction in minor offending/reduced imprisonment	Consequential	Those rough sleeping are known to be at higher risk of offending and some reduction in offending is likely once service users are no longer sleeping rough and are addressing other issues.	Some minor reductions assumed – at low confidence – based on low assumptions of prevalence and impact.

Table H.1 – Main assumptions in the Homelessness sector



## Appendix I – Main assumptions: Criminal justice

Table I.1 below provides more details of the main calculations and assumptions made to estimate value for the Criminal justice projects listed in the main report in section 3.7. It also explains specific assumptions made in relation to the two other projects listed in this group. Please see Appendix D above for an explanation of column headings.

Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
Criminal justice projects		All the projects in this group have different outcomes but share a specific objective and related outcome to reduce offending and re-offending.	
Peterborough One project – reduction in reoffending	Consequential	Peterborough One measured an overall reduction in offending across two successive cohorts against a Propensity Score Matched (PSM) statistical comparison group, identifying an overall reduction in offending, according to the final impact evaluation, of 9.02% (Anders and Dorsett (2017): HMP Peterborough Social Impact Bond - cohort 2 and final cohort impact evaluation). Apart from a separate calculation for individual cohorts this was the only outcome measure for the project.	We used the overall reduction in offending figure of 9.02% and data from the final impact evaluation on the total and average number of offences committed, and total and average length of prison sentences prior to the intervention, to calculate the impact of a 9.02% reduction on both offences committed and future prison avoided. We then converted this to value using the average costs of an offence and of imprisonment – see Appendix B. We have high/medium confidence in these estimates because of the robust nature of the project's measurement of impact against a PSM comparison group.  Note we took all data on this project from the impact evaluation referenced above.
Other project – reduction in offending	Consequential	The other project in this group worked with young people at high risk of offending to improve their confidence, gain qualifications etc. and thus be less likely to offend. It measures reduced offending through the absence of convictions for specified periods.	We used data from the project on how many young people did not offend to make assumptions about avoidance of both offences and imprisonment. assigning value using the average costs of an offence and of imprisonment – see Appendix B. Estimates are at medium/low confidence because we are



Cost avoided or value created	Direct or Consequential	Rationale or theory of change	Comments
			making assumptions rather than reduced offending being observed directly.
Other projects – achievement of level 2 qualifications	Direct	Outcome directly measured and paid for under the Rate Card for these projects	All outcomes valued solely on economic lifetime value and assuming they are level 2 apprenticeship qualifications.
Other projects – achievement of BTEC qualifications	Direct	There is one 'Other' project which has similar outcomes to the YEF and Innovation Fund projects but with a different and simpler Rate Card.  Qualifications measured are specifically BTEC level 2	Employment outcomes have been valued as for other Employment and training SOCs see Appendix F. BTEC qualifications have a different lifetime value which has been used only for this project – see Appendix B

Table I.1 – Main assumptions in the Criminal justice sector



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