

A close-up photograph of a large pile of fresh apples, with some showing red and green hues.

Food for Life

A Social Return on Investment Analysis of the Locally Commissioned Programme Full Report

Food for Life: a Social Return on Investment Analysis of the Locally Commissioned Programme. Full Report

The study has been led by Mat Jones with support from Hannah Pitt, Liz Oxford, Judy Orme, Selena Gray, Debra Salmon, Robin Means, Emma Weitkamp, Richard Kimberlee, and Jane Powell from the Public Health and Wellbeing Research Group at the University of the West of England, Bristol (UWE Bristol).

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Contents

Contents	3
EXECUTIVE SUMMARY	5
Introduction	5
Food for Life locally commissioned programme	5
Social Return on Investment (SROI)	5
Methods and research process	5
Overall SROI results	7
Share of value by stakeholders and interest sectors	7
The case study areas: similarities and differences.....	9
Sensitivity analysis: testing the results.....	9
Strengths and limitations of this study	10
Conclusion	10
INTRODUCTION	11
Background, aim and objectives of the study	11
Food for Life and locally commissioned programmes	11
Context: economic studies of FFL and similar programmes	12
SOCIAL RETURN ON INVESTMENT	14
The Social Return on Investment methodology.....	14
The six stages of SROI analysis	15
STAGE 1: Establishing Scope and Identifying Key Stakeholders.....	16
The scope of the SROI analysis.....	16
FFL Locally Commissioned Programme in Kirklees	17
FFL Locally Commissioned Programme in Calderdale.....	19
Key stakeholders: sampling and data collection	20
STAGE 2: Mapping inputs, outputs and outcomes	21
Mapping inputs	21
Mapping outputs and reach of activities	22
Mapping outcomes	24
Summary and conclusions from the stakeholder interviews.....	31
STAGE 3: Evidencing and valuing outcomes	32
Sources of evidence	32
Making a judgement on outcomes	33
Putting a value on outcomes.....	33
Negative outcomes	34
Outcomes and proxy values	34
STAGE 4: Establishing impact	40
Deadweight	40
Displacement.....	41
Attribution.....	41
Drop-off and discounting	42
Calculating the impact.....	42
STAGE 5: Calculating the SROI.....	43
Net Present Value	43
Calculating the Social Return on Investment Ratio.....	43
Sensitivity analysis.....	43
Outcomes for stakeholders	44
SROI Calculation for the Food for Life Commission in Kirklees.....	44
SROI Calculation for the Food for Life Commission in Calderdale	46
Synthesis of the SROI calculations for the two case study areas.....	47

STAGE 6: Reporting, using and embedding.....	49
DISCUSSION, RECOMMENDATIONS & CONCLUSIONS.....	50
Overview	50
Value to stakeholders.....	50
The case study areas: similarities and differences.....	51
The findings in the context of other SROI research	52
Strengths and limitations of this study	52
Recommendations	53
Conclusion	53
REFERENCES	54
Appendix 1 – Stakeholder List.....	58
Appendix 2 - Stakeholder interview questions (1).....	59
Appendix 3 – Stakeholder interview questions (2)	60
Appendix 4 - Calculating Inputs.....	61
Appendix 5 - Impact Map and Data Sources.....	66
Appendix 6- Assessment and valuation of health outcomes.....	66
Appendix 7- FFL Locally Commissioned Programme Logic Model.....	68

EXECUTIVE SUMMARY

Introduction

With a focus on healthy and sustainable food culture, Food for Life delivers a wide range of activities that aim to have a positive and lasting influence on people's lives, social institutions and the natural environment. Food for Life originated as a school and catering settings initiative, and has evolved as a local authority-wide programme that can involve a range of settings including hospitals, children's centres and care homes – as well as schools. The aim of this study is to evaluate the impact of Food for Life's programme activities in local authority areas using the Social Return on Investment (SROI) methodology.

Food for Life locally commissioned programme

Food for Life is led by the Soil Association and works in partnership with Garden Organic, Focus on Food, the Health Education Trust and the Royal Society for Public Health. Food for Life seeks to promote a "good food culture" through supporting practical delivery and influencing public decision making.

Food for Life (FFL) operates a programme of schools awards to support work to embed food within the curriculum and the wider setting, and have recently introduced a parallel award for early years settings. FFL have also established a programme specifically for hospitals, to support NHS trusts to deliver a health-promoting approach to food. A distinct but related programme is the Food for Life Catering Mark (FFLCM), an independent audit of caterers. This offers food providers accreditation for "taking steps to improve the food they serve, using fresh ingredients which are free from trans fats, harmful additives and GM, and better for animal welfare" (FFLCM 2015).

A number of local authorities in England have commissioned FFL to support delivery of their priorities, with some areas now looking beyond their initial focus on schools to connect with food in other settings. FFL locally commissioned programmes involve a coordinated approach between networks of schools, food producers, food suppliers, caterers and other agencies. In order to examine the social value created by the FFL local commissions we selected two local authority areas of Calderdale and Kirklees for case study analysis.

Social Return on Investment

Social Return on Investment (SROI) is a framework for measuring and accounting for change in ways that are relevant to the people or organisations that experience or contribute to it. It provides an assessment of whether value is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. SROI captures value often left out of more traditional methods of economic evaluation such as cost benefit analysis. A number of SROI studies have been conducted on FFL and similar initiatives. These have mainly identified benefits to the local economy. Little research has examined the health, educational and wider benefits of programmes such as FFL when delivered at the local authority level.

Methods and research process

The study followed the standard stages of SROI analysis. Approval for the research was obtained through the UWE HAS Research Ethics Committee. For the two case study areas we focused on a 24 month period and sought to reflect all aspects of commissioned work. **Forty seven stakeholders were interviewed** to provide perspectives on the outcomes of the programme. These individuals included school teaching staff, school cooks, catering managers, catering suppliers, staff from local food businesses and producers, hospital staff, programme delivery staff, commissioners and advisors to the programme (see box below). Additional sources of information about stakeholders' perceptions of outcomes were available through programme

records. A total of **78 written statements were analysed** from training feedback forms, FFL and FFLCM award application forms, teacher questionnaires completed as part of pupil survey research, case study reports and press releases.

Stakeholders report on the outcomes of Food for Life

Examples of feedback from 47 interviewees

“The skills one of our students got [from cooking skills in school] directly helped him get an apprenticeship with a caterer.” [Calderdale, Secondary Head Teacher #1]

“I’ve found we’ve been able to do some quite difficult topics through food-based lessons, for instance cooking lessons have been a great opportunity to compare food origins and learn about carbon footprints.” [Kirklees, Primary Teacher, #3]

“Parents have said to me that their children are asking lots of questions about where food comes from. It’s been a good project for getting whole families involved” [Calderdale, Primary Teacher, #4]

“We have had well attended events with the majority of parents and the local community attending. We’ve got to meet people from local groups we didn’t know about, like the bee keepers club and the allotment society.” [Calderdale, Primary Teacher #2]

“I now have a very active role in cooking club, tasting sessions...I’m getting listened to... I’m very proud of my kitchen.” [Kirklees, Primary Cook #3]

“Business has been good. With me and the rest that’s six jobs and I’d say most of them are off the back of our schools [and local authority] contracts...

[These contracts are] helping us get over the ‘stigma’ about organic - that organic is time-consuming to process, expensive or unreliable. They’re learning. We’re learning too about what orders we can and can’t do.” [Kirklees, Supplier #4]

“For us the [FFL] catering mark has given us a structure. We’ve got a very good relationship with FFL. We need to continuously promote the service and FFL helps with this... If we hadn’t been working together the [school meal] take up might not have been as high as it is.” [Kirklees Caterer #2]

The research sought to make **a comprehensive assessment of costs**. In addition to local authority and clinical commissioning group funds, we factored in funds from the Big Lottery, the Department for Education and the cost of some staff time in school, hospital and catering settings.

Although SROI is not centrally focused on outputs, a notable feature of the programme was the scale and reach of the initiative, particularly in primary and special schools in the two areas. For example, over the 24 month period of the commission:

- in Kirklees 56 schools out of a total of 182 had enrolled with FFL or achieved an FFL award.
- in Calderdale 27 schools out of a total of 113 had enrolled with FFL or achieved an FFL award.

- in both areas FFL continued to support schools (40 in Kirklees and 43 in Calderdale) that had already enrolled with the programme prior to the commission.

These data indicate that **over 60,000 children and young people, 2,500 teaching staff and almost 1000 catering staff were exposed to the FFL programme** for the two areas combined.

Stakeholders reported 55 outcomes that we grouped thematically, assessed in terms of their potential overlap, and examined their viability for inclusion in the next stage of analysis. This involved the identification and collection of potential sources of evidence to estimate the impact of these perceived outcomes. We used data from a cross-sectional evaluation survey of Key Stage 2 pupils; staff training feedback evaluations; FFL programme monitoring and evaluation records; other survey data, for example on hospital food; questionnaire returns from food suppliers and caterers; and direct reports from interviewees. **The study examined both negative and positive outcomes**, and sought to locate appropriate financial proxies to support monetary valuation.

Overall SROI results

The social return is expressed as a ratio of present value divided by value of inputs. Although there are likely to be impacts of the programme over many years, we calculated the value of the impacts only up to three years. This was intended to provide funders with an understanding of the social value of the programme over the shorter term of a local planning cycle.

Stakeholders in the two case study areas identified a similar range of outcomes and data sources. This was not surprising given that the commissions had similarities in programme design and delivery. Stakeholders also reported synergy and collaboration between the two local commissions with regard to staff training, food procurement and hospital settings work. We therefore produced a SROI ratio based upon the combined findings of the two case studies.

The total financial value of the inputs for the two case studies was £395,697 and the total present value was £1,743,046. **This provided a SROI ratio of £4.41 of social value created for every £1 of investment.**

Share of value by stakeholders and interest sectors

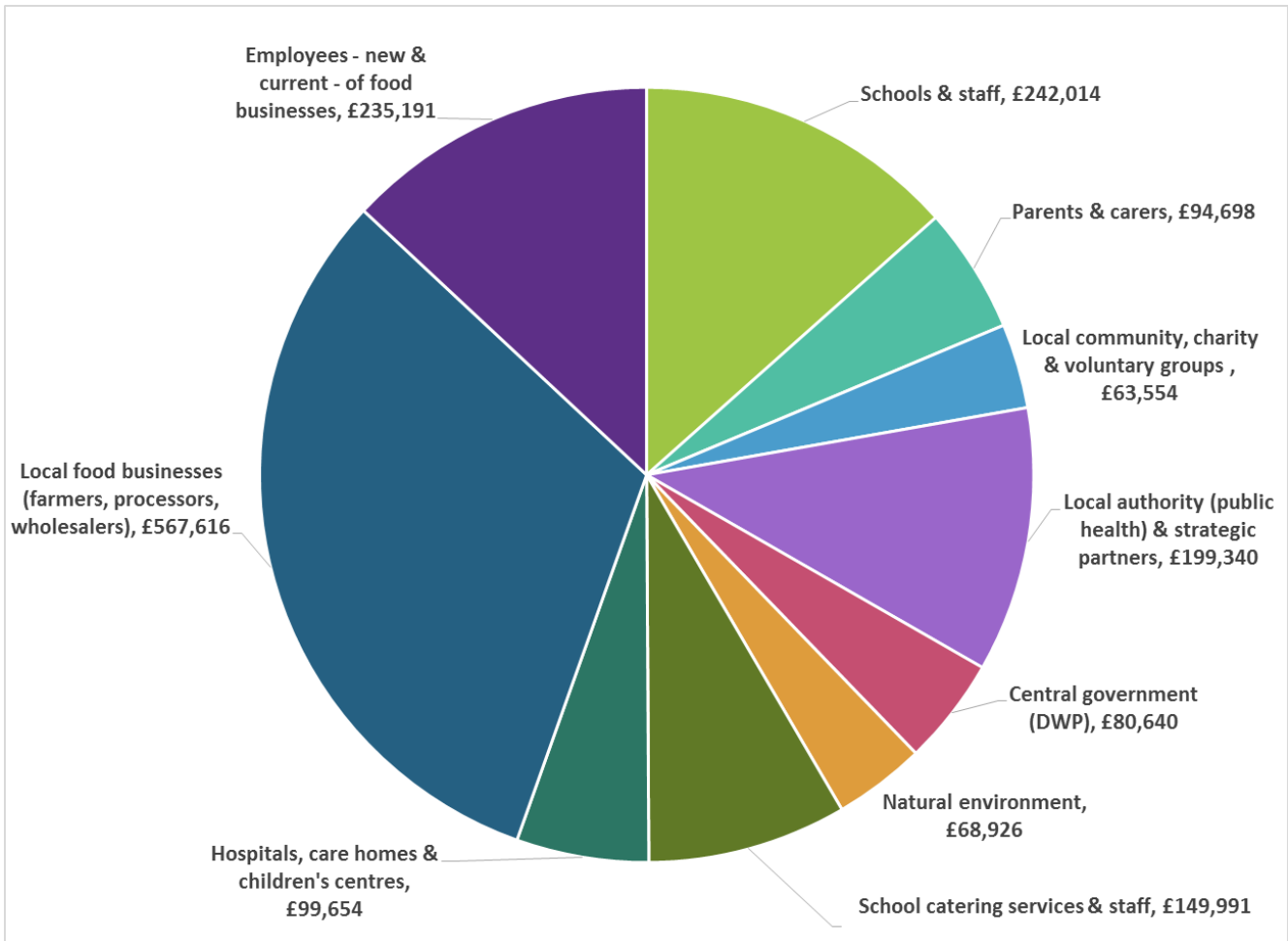
The value of the programme can be expressed with regard to different stakeholders or sectors of interest. A breakdown is provided in the chart below.

Local suppliers (farmers, processors and wholesalers) retained or gained new sales through contracts with caterers. The stability of large ongoing contracts lent greater business security, contributed towards new local job opportunities, job security and increased sales of goods direct to the public through farm shops, market events and other outlets. These changes are also beneficial to **central government** in the form of local employment creation, tax revenues and reduced welfare spending.

School catering services benefited from the FFL Catering Mark in terms of business security, retention of contracts, improved staff performance and increased capacity to develop and implement procurement of sustainable foods. Small increases in school meal sales over the 24 month period could be attributed to FFL in some schools, although the evidence was mixed in this respect. Cooks and other catering staff benefited from training opportunities, peer networking and improved job satisfaction.

Perhaps one surprising finding was the role of Food for Life in supporting the **working practices of teaching and catering staff**. Some of this took the form of curriculum support, skills development, expert support and networking opportunities. Other outcomes - albeit less tangible - were reported to carry equal weight, including the role of FFL in promoting enjoyment and a sense of

accomplishment at work. Some senior leaders in schools, catering agencies and other settings felt that the link between positive food culture and staff wellbeing was not a peripheral benefit, rather it underpinned a productive and high performing education workplace.



Local Authority Public Health and the local NHS are likely to have benefited from improvements to the dietary health of children. Research in Kirklees and Calderdale found that Year 4-5 pupils in schools engaged with FFL were twice as likely to eat five or more portions of fruit and vegetables a day compared to pupils in schools not involved in the programme. We used this data to estimate the short term and longer term impact on reduced healthcare use.

Food for Life is a popular programme in schools and other settings and acts as a bridge with local communities. **Parents and carers** benefited through improved relationships with school and volunteered at FFL school events, which in turn support children's readiness to learn and overall wellbeing. Rather than duplicating the work of other **community and charitable agencies**, FFL largely helped stimulate local voluntary activities through, for example, market events and community visits. The proactive approach of the FFL programme teams in partnership work with other agencies was a theme running through the stakeholder interviews.

New settings work with **hospitals, care homes and children's centres** were in the early stages during the 24 month commission period. The main benefits took the form of staff training and expert support to caterers and senior management in changing organisational practices. Work in hospital settings had advanced quickly, despite major challenges in terms of the organisation scale, and there was some evidence of a positive impact on food waste and patient satisfaction with hospital food.

Improvements in reduced food wastage and reduced transportation were the main environmental benefits that we were able to quantify. As has been reported in other research, other outcomes for the **natural environment** and sustainability were more difficult to evidence at level of a local authority study. A scaled up SROI analysis of the national FFL initiative, and particularly the FFLCM, would provide an evidence platform to examine more clearly the impacts of, for example, improved biodiversity from organic food production methods, reduced consumption of meat and dairy products and higher animal welfare standards.

Towards the end of the SROI study Food for Life and Age UK started a pilot intergenerational project in the case study areas. This was directed at supporting socially isolated older people to help with growing and cooking activity in FFL schools. Although it was too early for us to collect evidence of impact for this study, it is plausible that the pilot would add further social value to schools and volunteers involved in the Food for Life locally commissioned work, arising from new partnerships and economies of effort between volunteers, agency staff, caterers and members of the local community.

The case study areas: similarities and differences

Kirklees and Calderdale case study areas illustrate important features of FFL local commissions including the role of grass roots networks, coordinated local food strategies and different catering models. They show how benefits can be created through extending work from schools into other settings such as hospitals, early years and care homes. As adjacent local authorities the two areas also acted as a basis for understanding the social value of FFL at a sub-regional level.

The SROI ratio for Calderdale (£1:3.70) was lower than that for Kirklees (£1:5.12). A number of reasons could account for these differences:

1. The pupil and other populations of Kirklees are about twice those of Calderdale. This means that potential reach and scale of the programme in Kirklees was significantly greater than that of Calderdale.
2. The catering systems are very different. The local authority caterer in Kirklees has contracts with nearly all schools in the authority and holds the Silver Food for Life Catering Mark. Large numbers of stakeholders are therefore affected by changes in FFLCM-related practices. By contrast reforms to school catering in Calderdale are more heterogeneous and less systemic across all schools.
3. It is possible that the Calderdale programme creates similar value to the Kirklees programme. However the availability of evidence, suitable indicators and appropriate financial proxies was more difficult to locate in the case of Calderdale than in Kirklees.

These factors show that it is not advisable to make crude comparisons between the two areas, without first taking into account the different local contexts.

Sensitivity analysis: testing the results

Sensitivity analysis is a method for testing the extent to which the SROI results would change if we adjust estimates or removed factors from the analysis. The lowest estimate, based on halving the value of all outcomes, produced a ratio of £1:2.21. The highest estimate, based on reducing drop-off for all outcomes, produced a ratio of £1:6.29. **The majority of sensitivity analyses found SROI ratios between £1:3.06 and £1:4.46.**

Sensitivity Analysis	Calderdale	Kirklees	Two case studies combined
Findings from analysis	£3.70	£5.12	£4.41
Increasing deadweight to 50%	£2.33	£3.16	£2.75
Increasing displacement to 50%	£2.89	£3.18	£3.04

Increasing attribution to 50%	£3.06	£3.60	£3.33
Changing drop-off to 10% for all outcomes	£6.91	£7.51	£6.29
As above, drop-off 75%	£3.48	£4.03	£3.75
Halving all values of outcomes/ beneficiary numbers	£1.85	£2.56	£2.21
Removing all dietary health-related outcomes	£3.18	£4.56	£3.87

The role of the programme in improving the dietary health of children was a challenging area for valuation due in part to the lack of well-established financial proxies. Removing the value of all dietary health-related outcomes for children reduced the SROI ratio by a relatively small amount overall, from £1:4.40 to £1:3.87. Overall, multiple changes to the estimates of deadweight, attribution and drop-off indicates that substantial changes would have to be made to the assumptions in order for the ratio change from positive to negative. These calculations show that even when significant changes are made to the analysis the results still show clear evidence of social value being created up to 3 years after the FFL intervention.

Strengths and limitations of this study

This study builds upon the principles and methods adopted in previous SROI research. We gathered the perspectives of a large number and variety of stakeholders and used this information to underpin the analysis of outcomes. We took into account a considerable body of evidence from evaluation fieldwork and external research and the study benefited from the availability of well recognised and established financial proxies for many of the outcomes. In order to avoid over-claiming on the role of the programme in creating change we factored in the role of other initiatives and changes in the national policy environment such as the introduction of Universal Infant Free School Meals. The validity of the findings has been explored with key stakeholders and further assessment will be made as the findings of the study are disseminated.

One of the challenges concerned creating an account that adequately captured the scope and breadth of the impacts. This placed limits on the resources available to collect comprehensive data across all outcomes. Some stakeholders declined or were unable to provide detailed supporting data. We focused on short term outcomes rather than those that might result over a longer period beyond three years.

Conclusion

This study found that FFL is valued by schools, civil society, local business and wider stakeholders as a locally commissioned programme in local authority areas. The SROI provides a financial measure of this value: that for every £1 spent on FFL there is social value of £4.41 created over a three year period. In the analysis, multiple adjustments to the role of different outcomes and other factors shows that the social value is likely to fall between a lowest estimate of £2.21 and a highest estimate of £6.29. The clustering of values around a narrow range of £3 to £4 lends confidence to the validity of the results.

The methods and findings from this research are significant for other Food for Life local commissions, the Food for Life Catering Mark and other area-based food programmes, such as the Sustainable Food Cities initiative, both in the UK and internationally. In many instances, the bottom-up research method places limits on the generalisability of SROI results. However in this study the close correspondence with other SROI studies in terms of methodology and findings suggests that a similar range of outcomes can be anticipated in other areas where an FFL programme model is implemented, especially where the programme is directed at schools and public service catering - and engages with other settings such as children's centres and hospitals.

INTRODUCTION

Background, aim and objectives of the study

With a focus on healthy and sustainable food culture, Food for Life (FFL) delivers a wide range of activities that aim to have a positive and lasting influence on people's lives, social institutions and the natural environment. Originating as a school and catering settings initiative, Food for Life has evolved as a local authority-wide programme that can involve a range of settings including hospitals, children's centres and care homes – as well as schools. Whilst the integrity and principles underpinning FFL's whole system approach are well recognised, it is a greater challenge to draw together and assess the total impact of the programme. Social Return on Investment (SROI) is a method for systematically creating an account of the resources (or investments) that go into a programme and the outcomes (or social returns) that are plausibly created. The holistic framework of SROI makes it well suited to develop an understanding of the value of the Food for Life local authority commissioned programme.

The aim of this study is to evaluate the impact of FFL's programme activities in local authority areas using a case study focus with the authorities of Calderdale and Kirklees. The objectives are:

- To examine the wide range of outcomes of the programme and to develop a framework for collecting evidence of the effects of the programme.
- To identify suitable indicators that enable the measurement of outcomes and to express the social value of the programme.
- To place these findings in the context of the wider evidence base and to show how the social value of the programme can be interpreted by stakeholders.

There is a particular need for an SROI analysis to inform audiences about the costs and benefits of the locally commissioned FFL programme and to support the development of area and settings-based food strategies. Previous SROI research focusing on FFL procurement practices and similar schemes internationally has identified substantial value to the local economy and the natural environment. Less is documented about the health, wellbeing, educational and wider social returns of FFL and related programmes.

Food for Life and locally commissioned programmes

Food for Life is led by the Soil Association and works in partnership with Garden Organic, Focus on Food, the Health Education Trust and, since 2013, the Royal Society for Public Health. Food for Life (FFL) seeks to promote a "good food culture" through supporting practical delivery and influencing public decision making. According to Food for Life:

The programme is about more than just food on the plate; it considers where food comes from and how it's grown, cooked and experienced. We provide practical advice and support, and reward and celebrate success (FFL 2015).

FFL operates a programme of schools awards to support work to embed food within the curriculum and the wider setting, and have recently introduced a parallel award for early years settings. FFL have also established a programme specifically for hospitals, to support NHS trusts to deliver a health-promoting approach to food.

A key focus of FFL is locally commissioned programmes for schools where there are the following four objectives:

- i) To support and facilitate schools, the wider school community and caterers to have the opportunity, confidence and ability to access healthy and sustainable food;
- ii) To provide the skills and knowledge for the school community to make informed food choices leading to healthy and sustainable food behaviours;
- iii) To enable change in food culture within school settings through a whole school approach;
- iv) To enable change in food culture across wider health, education, and school meal systems through influencing stakeholders and strategy at local and national levels to adopt the FFL framework and ethos.

Schools can achieve bronze, silver or gold awards within the Food for Life Award Scheme according to the degree of progress made against four areas: food policy and leadership, food quality, food education, community and partnerships.

A distinct but related programme is the Food for Life Catering Mark (FFLCM), an independent audit of caterers. This offers food providers accreditation for “taking steps to improve the food they serve, using fresh ingredients which are free from trans fats, harmful additives and GM, and better for animal welfare” (FFLCM 2015). The catering mark has three award levels - bronze, silver, gold. Caterers are required to meet the standards set out in the FFLCM criteria, and pay a fee for annual inspection against the standards. FFLCM is operated by a dedicated team within the Soil Association, which frequently interacts with FFL staff. The catering mark is also linked to FFL awards as accreditation demonstrates that an organisation meets the award’s food quality requirements. The FFLCM is open to any caterer, hence it has worked with organisations in a wide range of sectors.

A number of local authorities in England have commissioned FFL to support delivery of their priorities, with some areas now looking beyond their initial focus on schools to connect with food in other settings. FFL locally commissioned programmes include a focus on developing a coordinated approach between networks of schools, food producers, food suppliers, caterers and other agencies that can contribute towards a food strategy. The FFL Catering Mark is an important aspect of the local commissions, particularly where there are influential catering providers that can take up the scheme, for example in school and hospital settings.

In order to examine the social value created by the FFL local commissions we selected two local authority areas for case study analysis. Since 2012/13 FFL has been independently commissioned to deliver services in the two local authorities Kirklees and Calderdale. The commissions built upon earlier engagement between local agencies – notably schools and caterers – and both FFL and the FFLCM. Both local authority (LA) areas have areas of high social deprivation and feature inequalities in health, diet, economic and educational outcomes. In Calderdale the LA Public Health department and the Clinical Commissioning Group had commissioned FFL to work both in school and additional settings. In Kirklees commissioning was also led by the Public Health team as part of a wider coordinated local food strategy that brought together a range of stakeholders, and also involved delivery in schools and additional settings.

Context: economic studies of FFL and similar programmes

Increasingly decision makers and the wider public not only want to be informed about the effects of interventions, but also on their costs and cost-effectiveness. Wide ranging and comprehensive programmes - such as FFL - are likely to have impacts across a range of the different areas and

can address a number of social priorities. This suggests that the costs and benefits of such programmes need to be understood in their broadest sense. It is also important to appreciate how programmes can achieve their objectives in collaboration with other initiatives and how their effects may take many years before they come to fruition.

A number of SROI studies have been conducted on FFL and similar initiatives. Lancaster et al's SROI analysis (2008) examined the impact of a Food for Life pilot programme on primary school meals provision in East Ayrshire, Scotland. Over a four year period the initiative covered 26 of the authority's 43 primary schools. Lancaster et al concluded that the Food for Life initiative provided £6 in environmental, economic, health and other benefits and for every £1 invested. Much of this value was linked to the value of contracts to local food suppliers and their employees – and to the environmental benefits of reduced food transportation. Health outcomes were assumed on the basis of long term dietary changes, however it was beyond the resources of the study to clearly evidence this claim.

A subsequent SROI study of Food for Life was led by the New Economics Foundation on school catering in Nottinghamshire and Plymouth (Kersley & Knuutila, 2011). This study was primarily focused on the local economic impact of changes to procurement practices by local authority caterers, and drew upon some of the conventions for SROI analysis established in the Ayrshire study. After examining catering reforms that were consistent with FFLCM's food procurement framework, Kersley & Knuutila's study found an SROI ratio of £3 for every £1 invested. They concluded that "the results...suggest that there are substantial economic and social benefits to be gained from public procurement practices which focus on a sustainable agenda around seasonal and local produce". The authors also noted that:

"the full benefits of an FFL approach be significantly higher than this however. The analysis presented in this report is only partial. It does not take into account any of the health, educational or cultural benefits of a whole school approach to food which are primary objectives of FFL".

More recently commentators such as Stein (2012) have drawn attention to FFL's gold award, and how its emphasis on reducing meat and dairy consumption is directly linked to substantial forms of value to the environment. An SROI study conducted by CCRI (2013) of the Big Lottery funded Local Food programme examined a wide range of outcomes including benefits to the local economy, community life, environmental sustainability and health and well-being. Elements of this research are relevant to FFL because the Local Food programme also had a focus on community diet and food sustainability goals.

Wider economic evidence shows that poor diets and obesity negatively impact individuals, healthcare systems, employers, and the economy as a whole (Lehnert et al, 2013; Park et al, 2012). Joint FSA/DoH analysis the Cabinet Office Strategy Unit in 2008 estimated that 42,200 deaths could be avoided each year if the UK population met 5 a day guidelines for fruit and vegetable intake. Recent studies have sought to extrapolate health effects over the life course of childhood programmes directed at health promotion. This is on the basis that there now exist adequate longitudinal data as well as established models to make credible predictions particularly with regard to weight-related poor health (e.g. Pil et al, 2014; Tran et al, 2014). For example a recent European study (Sonntag et al, 2016) estimated that overweight and obesity during childhood resulted in an excess lifetime cost per person of €4,209 (men) and €2,445 (women).

The potential diet-related benefits of programmes aimed at children are likely to be long term in character. As Lehnert et al note "in the prevention of obesity, health benefits may slowly accumulate over time and it can take many years before an intervention has reached full effectiveness" (ibid.). Research on short term economic impact has largely focused on healthcare

utilisation (John et al, 2012). Solmi and Morris (2015) report that evidence of an association between obesity in childhood and adolescence and healthcare use and costs is mixed: the link has been found in some, but not all, primary research studies on the subject. One Australian study (Au, 2012) found that children who were obese at age 4–5 had higher prescription expenditures over 5 years. Solmi and Morris’s (2015) longitudinal study of children over three time-points aged 5, 7 and 11 in the UK found that obese children are more likely to use regular medications and have comorbid conditions. There was some evidence of a socioeconomic gradient in this association, suggesting that the medication costs are higher with respect to lower income groups. Lehnert et al (2012) note that short term impacts are unlikely to be limited to children’s use of healthcare services: “school-based programmes...may exhibit substantial spillover effects (also called multiplier effects), i.e. generate (health) benefits in the family or broader community” (ibid.) such as changes in dietary behaviour of parents and other family members (see also Basu & Meltzer, 2005).

Whole settings interventions that include a focus on environmental changes are likely to be most cost effective both in the short and long term. A review of interventions to promote fruit and vegetable consumption found that those based on dietary counselling or similar one-to-one interventions are not highly cost effective (Cobiac et al, 2010). The authors recommended further evaluation on programmes that address whole populations. Lehnert et al’s review (2012) of obesity prevention programmes found that the majority of interventions offered good value for money – with those that focus on environmental changes (for example to the price or availability of healthy foods) being most cost-effective. The authors conclude that community interventions – or those that offer a combination of behavioural and local environmental interventions “may be crucial if a meaningful impact on the population level is aspired.”

The FFL local commissions include work with new settings in addition to schools. Whilst there has been little research on the economic impacts of reforming food and nutrition in early years and care home settings, the Independent Panel on Establishing Food Standards in Hospitals undertook a cost benefit analysis of implementing a food and drink strategy in compliance with five sets of guidelines. The panel concluded that there were significant potential benefits:

“When fully implemented, these guidelines are expected to cost the NHS approximately £7m (£4.9m - £9.1m) each year. However, through reducing length of stay and improving catering efficiency, savings of £9.6m (£5.0m - £11.9m) may be realised. This results in an overall annual saving to the NHS of approximately £2.55m. In addition to this a further £1.5m (£0.8m - £2.4m) is expected in terms of health benefits to staff and patients.”
(Hospital Food Standards Panel, 2014)

Overall then, a growing body of research is establishing both the methods and the evidence of health and wider social cost effectiveness of early interventions on diet. This is complemented with other research that has examined the wider societal and local economic impacts of food reform programmes. From this research, the Social Return on Investment framework has emerged to provide a useful basis for investigating the multiple impacts and the valuation of complex initiatives commissioned in local authority settings.

SOCIAL RETURN ON INVESTMENT

The Social Return on Investment methodology

The SROI methodology provides a platform to systematically account for broader outcomes of interventions and the value for money of such interventions. SROI is very

relevant and applicable, especially as the global focus shifts from “output” to “impact” and from “generous giving” to “accountable giving.” (Banke-Thomas et al, 2015, 600)

Social Return on Investment (SROI) is a framework for measuring and accounting for change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them.

SROI is one approach to economic evaluation of which there are many others including cost-effectiveness analysis (CEA), cost-utility analysis (CUA) and cost-benefit analysis (CBA). SROI is often advocated as a methodology well suited to give a more ‘holistic’ picture of value for money than other forms methods of economic evaluation (Arvidson et al, 2010).¹ SROI is perceived to have increasing relevance for understanding the non-health outcomes of public health interventions (van Mastrigt et al, 2015).

SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of £1 delivers £3 of social value. SROI is about value, rather than money. Money is simply a common unit and as such is a useful and widely accepted way of conveying value.

SROI can help to:

- understand the social, environmental and economic value created by your work;
- maximise the positive change you create and identify and manage any negative outcomes arising from your work;
- reconsider which organisations or people you should be working with, or improve the way you engage with your stakeholders;
- find ways to collect more useful, better quality information.

There are seven principles of SROI that underpin how it should be used:

1. **Involve stakeholders.** Stakeholders should inform what gets measured and how this is measured and valued.
2. **Understand what changes.** Articulate how change is created and evaluate this through evidence gathered, recognising positive and negative changes as well as those that are intended and unintended.
3. **Value the things that matter.** Use financial proxies in order that the value of the outcomes can be recognised.
4. **Only include what is material.** Determine what information and evidence must be included in the accounts to give a true and fair picture, such that stakeholders can draw reasonable conclusions about impact.
5. **Do not over claim.** Organisations should only claim the value that they are responsible for creating.
6. **Be transparent.** Demonstrate the basis on which the analysis may be considered accurate and honest and show that it will be reported to and discussed with stakeholders.
7. **Verify the result.** Ensure appropriate independent verification of the account.

The six stages of SROI analysis

Carrying out an SROI analysis involves six stages:

¹ <http://www.thesroinetwork.org/sroi-analysis/the-sroi-guide>

1. Establishing scope and identifying key stakeholders.
2. Mapping outcomes through engagement with stakeholders to develop an impact map (also called a theory of change or logic model) which shows the relationship between inputs, outputs and outcomes.
3. Evidencing outcomes and giving them a value. This stage involves finding data to show whether outcomes have happened and then giving them a monetary value.
4. Establishing impact. Identifying those aspects of change that would have happened anyway or are a result of other factors to ensure that they are taken out of the analysis.
5. Calculating the SROI. This stage involves adding up all the benefits, subtracting any negatives and comparing the result with the investment. This is also where the sensitivity of the results can be tested.
6. Reporting, using and embedding. This last step involves verification of the report, sharing findings with stakeholders and responding to them, and embedding good outcomes and processes.

Banke-Thomas et al's (2015) systematic review of studies between 2005 and 2011 found that health promotion was the field of public health in which the SROI methodology has been most applied. Further relevant research has been conducted on child health and nutrition. Of 19 studies identified the SROI ratios ranged from 1.10 to 11.00 although, as the authors emphasise

“because of the heterogeneity in the manner of conduct of the SROI studies and indeed the economic theory that underpins the SROI methodology itself, it is not appropriate to compare the ratios to identify the most impactful or the intervention with the most value-for-money.” (p586)

With respect to the SROI methodology, Banke-Thomas et al noted the following good practice arising from the studies reviewed:

- Triangulation of primary and secondary data sources
- The perspectives of programme beneficiaries should be central to all monetary valuations or financial proxies, although other stakeholders such as implementers, funders and promoters also bring an important perspective.
- Establishing the counterfactual should be objectively done, in order for example to determine what would have happened anyway
- Ensuring transparency throughout the SROI research process

STAGE 1: Establishing Scope and Identifying Key Stakeholders

The scope of the SROI analysis

The purpose of this SROI analysis is to evaluate the FFL Locally Commissioned programmes in Kirklees and Calderdale local authority areas. The analysis focuses on the 24 month period from 1st April 2013 to 31st March 2015.

For the Kirklees local commission, FFL had a 'start up' period from 1st February 2013 to 31st March 2013, and had been actively involved in the area since the development of phase 1 FFL programme from 2007. Similarly in Calderdale FFL had worked with schools and other stakeholders since the inception of the programme in 2007. This history of engagement meant that a decision was needed on the period to select as the baseline for the SROI. The focus of this study is primarily on the added value of the FFL locally commissioned model, therefore the 12

month period prior to the start of the main commission is taken as the baseline. Later in this report we examine the influence of earlier work by FFL and the FFL Catering Mark teams in the area.

Research on the Kirklees FFL programme provided the initial framework for the SROI analysis; this framework was then applied to the Calderdale FFL programme, with adjustments to account for the different context and programme format. These differences mean that caution needs to be exercised when making comparisons between the two commissions and the SROI findings for each area.

FFL Locally Commissioned Programme in Kirklees

In 2013 NHS Kirklees commissioned FFL over 3 years to deliver the programme across all schools in the area. With the incorporation of public health services into local authorities, the commission passed over to Kirklees Council in 2013. An FFL Local Programme Manager coordinates the programme and a Steering Group, with a variety of local partner organisations, supports delivery of the FFL programme. Under the commission FFL offers a range of training opportunities for school staff in cooking, growing food, food leadership and farm links. There is also a strong focus on training for school cooks, which includes teaching cooking skills for children, understanding food quality and FFL criteria for food provenance, and composting at school. In 2014 Kirklees Council extended the commission to include development work in hospitals, care settings and early years settings.

Summary of the FFL Local Commission in Kirklees

Commissioner	Initially NHS Kirklees, then Kirklees Council with the incorporation of public health into local authority provision
Pre-commission FFL activity	50 schools enrolled, with 29 bronze awards, including 1 FFL flagship school.
Settings (and target populations)	All grant maintained schools (all pupils, staff, parents/carers); Pilot work in new settings – hospitals, care homes, early years (all participants).
Catering	Kirklees Council Catering holds contracts with the majority of schools in Kirklees and has held the silver FFLCM award prior to the FFL commission of 2013. Huddersfield Hospital is engaged with FFL’s hospital catering mark pilot work

Under the local commission a number of service outcomes have been specified as follows:

Schools

- The development of key life skills in growing and cooking and in understanding where food comes from amongst young people and their families

- The establishment of healthier behaviours around food via improved school food culture, with key messages travelling home to parents and wider communities
- Improved nutrition in the most disadvantaged pupils (through an increase in free school meal take up)
- Improved community and parental engagement in school activities
- Sharing learning with other areas

Care Settings/Domiciliary Care Settings

- Development of a contact list for care settings and domiciliary care in Kirklees
- All care settings in the area contacted by letter/phone/email to offer support to achieve the Catering Mark
- The set-up of a Cooks Network for care settings caterers
- At least one Catering Mark training session for caterers from care settings

Hospitals

- Engagement of Calderdale and Huddersfield NHS Trust in the FFL Steering Group
- The enabling of additional support/signposting for the whole setting approach in hospitals as appropriate including sharing learning with other settings
- Hold a Catering Mark training session for catering/serving staff

FFL Early Years Settings

- The set-up of a Cooks Network for early years caterers
- At least one Training Session held for early years settings staff
- Engagement of an Early Years representative in the FFL Steering Group

The FFL commissioned work in Kirklees closely fits together with the local strategic picture. The Kirklees Health and Wellbeing Board have identified food and nutrition as one of its four main priorities within the Joint Health and Wellbeing Strategy (Kirklees Health and Well-being Board, 2013) and this has led to the development of a Food Strategy Action Plan for Kirklees. Kirklees Food Partnership convenes a range of stakeholders with a shared interest in promoting healthier, more sustainable food and the role of food in local economic development. This is expressed in the Kirklees Food Charter that advocates for “Food that's good for people, good for places, good for our health and good for the planet” (Food Kirklees, 2015). Food strategy work is also part of the wider ‘community commitments’ of Kirklees Council that are concerned with supporting local businesses, community participation and social inclusion.

With respect to FFL’s school focused activity, the commissioned programme connects to the Kirklees Children and Young People Plan 2013-16 (Kirklees Council, 2013a). In this context the programme is intended as a universally available service to all publicly funded schools in Kirklees. Other work, notably that led by the Food Initiative and Nutrition Education (FINE) Project, delivers more targeted healthy eating training with disadvantaged groups (Kirklees Council, n.d.).

Kirklees School Catering Service is a key partner in this commission and has a history in supporting FFL activity in schools across Kirklees. It is the second largest local authority caterer

in the country and operates in 81% of middle and high schools and 99% of primary and special schools in the area (Kirklees Council, 2013b). Kirklees Catering Service holds the Food for Life Silver Catering Mark Award and is recognised as having a leading role in promoting school meal take up (ibid.).

FFL Locally Commissioned Programme in Calderdale

In 2012, NHS Calderdale (now Calderdale Council) commissioned FFL to build a sustained network of schools and communities committed to transforming food culture. A FFL Local Programme Manager has the role of establishing and facilitating the network, encouraging schools and local partner organisations across the borough to raise their current level of commitment to FFL. Training for teachers and other school staff is being provided for schools in food leadership, growing, cooking and farm links. Catering and food sourcing support is provided and a local Cooks Network has been developed (which aims to be self-sustaining) to provide a platform for sharing and networking, along with running workshops focusing on how to achieve FFL food quality and provenance criteria. The programme delivery is supported by a FFL Catering Mark Manager who is budgeted to work one day a week during school term times.

In October 2013 Calderdale CCG and Calderdale Council (Public Health) funded FFL for a further 2 years. Under this commission additional work includes in early years, care settings, and hospitals.

Summary of the FFL Local Commission in Calderdale

Commissioner	Initially NHS Calderdale and Calderdale Council, followed by Calderdale CCG and Calderdale Council
Start Date	July 2012
Programme length	1 year initially followed by 2 year extension
Pre-commission FFL activity	36 schools enrolled, with 6 bronze and 1 silver awards, including 1 flagship school.
Catering	A variety of types of catering provision. About 80% of schools provide catering in-house, in some cases as part of a schools consortium. Several private catering companies provide a service to small numbers of schools. The local authority schools meals service closed in September 2014 with provision to 18 schools going in-house or to a private provider. ISS Facilities Services provides catering for the Royal Calderdale Hospital and the retail section was awarded the FFLCM bronze award in 2015.

Settings (and target populations)	All grant maintained schools (all pupils, staff, parents/carers); pilot work in new settings – hospitals, care homes, early years (all participants)
Intervention	<u>Staff training</u> : developing a coordinated policy, food procurement, food growing, cooking in the curriculum, whole settings approach, running a farm visit and a farmer’s market <u>Support</u> : 1:1 visits, tailored support, curriculum linked resources, specialist partners, pilot work with new settings

The programme works within an Outcomes Based Accountability (OBA) framework – a set of performance based measures that the CCG and council use for commissioned services. FFL report against 22 performance measures that are grouped around the themes of:

- How much did we do? For example: number of teaching staff attending training.
- How well did we do it? For example: percentage of trainees reporting being confident to lead food related activities.
- Is anyone better off? For example: percentage of pupils eating 5-a-Day.

The FFL local commission is intended to contribute to local Public Health strategies to reduce and prevent obesity in the school environment, and is integrated with other programmes also commissioned locally, focusing on this priority. Drawing upon the local Joint Strategic Needs Assessment, Calderdale Public Health and CCG have shared focus on helping people to maintain healthy lifestyles and the need to address health inequalities across the authority. A particular concern has been the rising annual cost of diseases related to overweight and obesity in Calderdale. In 2003 this was £53 million, £55 million in 2010, and is estimated at £58.8 million in 2015. The prevalence of diabetes has been rising sharply. The Yorkshire and Humber Public Health Observatory estimates that 7.5% of people aged 16 years or older had diabetes in Calderdale in 2012. If current population change and obesity trends persist, the total prevalence of diabetes is expected to rise to 8.4% by 2020 and 9.3% by 2030 (YHPHO, 2012).

Both local commissions are engaged with Calderdale and Huddersfield NHS Foundation Trust (CHFT), which runs hospitals in Huddersfield and Halifax plus local outreach services. CHFT became one of the Big Lottery funded FFL hospital pathfinder pilots in 2014, and adopted the new food quality CQUIN. The two hospitals operate very different catering systems and this has influenced implementation of FFL activity. The catering service at Huddersfield hospital provides a bulk cook-chill service for patient food. A contractor runs retail outlets for staff and visitors. CRH has a different contract caterer for both patient food and retail outlets. Patient food is provided as plated meals which are regenerated on trolleys at ward level; the hospital was designed for such a system so has minimal kitchen space. As part of the national evaluation of FFL, UWE undertook a case study of CHFT’s catering (Gray et al, 2015).

Key stakeholders: sampling and data collection

Stakeholders are people or organisations that experience change - positive and negative - as a result of an intervention. Their experience makes them well placed to describe the change. The purpose of stakeholder involvement is to help identify the most important outcomes to the project and to set out an understanding of those outcomes that has been informed by stakeholders.

A list of stakeholders who experience change or affect the FFL LC programme was prepared in consultation with the FFL National Commissioning Manager together with the Local Programme Managers. We were also able to build upon our initial reviews of FFL local commissions to identify key interest groups (Pitt et al, 2014; Pitt & Jones, 2014). A table outlining this initial list and reasons for inclusion in qualitative interviews is included in Appendix 1. These individuals included school teaching staff, school cooks, catering managers, catering suppliers, staff from local food business and producers, hospital staff, programme delivery staff, commissioners and advisors to the programme. In total 43 in-person and telephone interviews were undertaken with stakeholders. An additional 4 people responded by email correspondence, giving a total of **47 stakeholder participants**. Details of qualitative interview schedules and tools used to collect quantitative data are included in Appendix 2 and 3.

Additional sources of information about stakeholders' perceptions of outcomes were available through programme records. A total of **78 written statements** were analysed from training feedback forms, FFL and FFLCM award application forms, pupil survey teacher questionnaires, case study reports and press releases. Using these different data sources, we organised a thematic analysis of the programme outcomes as perceived by stakeholders. These are set out in the next stage of the analysis.

The main intended beneficiaries of the programme are school children and, in the case of the new settings work, hospital patients, care home residents and children in nurseries. Others, notably the parents of school children, have a clear interest. Due to the limited resources of the study, we decided not to interview these groups directly. However other sources of information were able to provide an understanding of the experiences of these groups. This was particularly the case for primary school settings where there is previous evaluation research, surveys and consultations (Jones et al, 2012; Salmon et al, 2013; Weitkamp et al 2013; Kimberlee et al 2013).

STAGE 2: Mapping inputs, outputs and outcomes

SROI is an outcomes-based measurement tool. The aim of this stage is to map outcomes to develop an impact map, also called a theory of change or logic model, which shows the relationship between inputs, outputs and outcomes. Sections of the impact map are included throughout this chapter however the report is best understood when read together with the full impact map in Appendix 5.

Mapping inputs

In SROI, the investment refers to the financial value of the inputs. Inputs are what stakeholders are contributing in order to make the activity possible and are used up in the course of the activity – money or time, for example.

For both Kirklees and Calderdale the principle inputs are in the form of local commission funds from the local authority and, in the case of Calderdale, the Clinical Commissioning Group. In addition the local commissions benefited from resources made available to FFL from a grant to the Soil Association and partner agencies as part of the BLF Phase 2 Wellbeing Programme. A small amount of funds through the Department for Education's School Food Plan has also helped support FFL's work with schools in the two authorities.

Many FFL linked activities are integrated into the routine delivery of school activities. These include the provision of school meals and teaching of food-related education in class time. Such activities have not been included as programme costs because in most cases they would have occurred without the programme. However school staff stakeholders reported that the FFL programme was linked to some areas of additional time, and therefore costs to the school, for

completion of award applications. Similarly caterers reported that most aspects of taking up the FFL Catering Mark could be considered as part of a normal updating of practice. However we did include costs for additional time connected to completing the mark application and for the fee associated with the application.

With respect to hospital activity, the inputs for Calderdale & Huddersfield NHS Foundation Trust (CHFT) were staff time for steering group meetings and associated work, including time for communicating plans across the organisation to gain wider buy-in. External stakeholders also contributed staff time, including Healthwatch time to administer the patient survey. To meet FFLCM Bronze criteria the relevant catering operation had to increase sourcing of farm assured meat and MSC certified fish, and provide more customer information on the provenance of ingredients. These changes had some cost implications which had to be accommodated within the agreed budget.

Aside from the commission funds and Big Lottery funds, we identified no tangible inputs through the pilot work with care homes and early years staff. Further information on how the financial value of the inputs were calculated can be found in Appendix 4 Calculating Inputs.

Mapping outputs and reach of activities

Stakeholders identified a wide range of outputs. In the main, these can be organised in relation to the commissioned activities such as the numbers of schools enrolling with FFL or achieving awards, the delivery of training events and the numbers of children, staff and other beneficiaries engaged in programme activities.

When summarising the outputs, a notable feature of the local commissions in the two case study areas is the potential scale of the reach of FFL activities. For example in Kirklees over the 24 month period of the commission, 56 schools out of a total of 182 had enrolled with the programme or achieved an FFL award. In Calderdale 27 schools out of a total of 113 schools had enrolled with the programme or achieved an award in the same period. Meanwhile in both areas FFL had continued to work with schools (40 in Kirklees and 43 in Calderdale) that had already enrolled with the programme prior to 2013.

FFL local commissions potentially impact on a wide range of social groups. In terms of absolute numbers, the main intended beneficiaries of the FFL local commissions are school pupils and their families. School teaching and catering staff are also the intended beneficiaries of the school based programme. Tables 1 and 2 summarise the population reach of the schools-based programme in the two case study areas. For the two areas combined these data indicate that over 60,000 children and young people, 2,500 teaching staff and almost 1000 catering staff were exposed to the FFL programme.

Table 1: Kirklees school pupil population and intended beneficiaries of the FFL programme

Estimates for March 2015 based upon DfE Edubase (2014); Kirklees ONS data (2013 and 2015 projection); Yorkshire and Humberside Observatory Population Profiles (2015); Kirklees Council Education and Leisure Factsheet (2014); Schoolsnet (2015). "FFL Schools" defined as schools achieving Bronze or Silver FFL Mark status and/or part of Kirklees School Catering Service Silver FFLCM by March 2015

	All Schools				"FFL Schools"			
	Total schools	Total teaching staff ² (FTE)	Total catering staff (FTE)	Total pupils	Total enrolled or awarded schools	Total teaching staff	Total catering staff	Total pupils
Primary schools and nursery units	140	1,727	700	39,981	77	950	385	21,990
Middle schools	2	53	240	28,550	11	484	106	12,562
Secondary schools (LEA and Academies)	25	1048						
State sixth form & FE colleges	6	383	54	10,350	3	191	27	5,175
Special / Pupil Referral Units	9	132	45	1,294	5	66	22	718
Total	182	3,343	1,039	80,175	96	1691	540	40,445

Table 2: Calderdale school pupil population and intended beneficiaries of the FFL programme.

Estimates for March 2015 based upon DfE Edubase (2014); Calderdale ONS data (2013 and 2015 projection); Yorkshire and Humberside Observatory Population Profiles (2015); Schoolsnet (2015) "FFL Schools" defined as schools achieving Bronze or Silver FFL Mark status by March 2015

	All Schools				"FFL Schools"			
	Total schools	Total teaching staff (FTE)	Total catering staff (FTE)	Total pupils	Total enrolled or awarded schools	Total teaching staff (FTE)	Total catering staff (FTE)	Total pupils
Primary schools and nursery units	89	760	445	17,570	72	614	360	14213
Secondary schools (LEA and Academies)	16	670	162	17,000	7	260	63	6611
State sixth form & FE colleges	2							
Special / Pupil Referral Units	6	60	20	570	5	48	16	456
Total	113	1490	627	35,140	70	922	439	21280

New Settings: early years, care homes and hospitals

New settings work in care homes and early years nurseries and children’s centres was in its early stages at the time of this study. The FFL programme was one year into its commission by the final point for collecting information for the SROI analysis. By this stage the main outputs concerned training events for staff in these agencies and introductions to the FFL catering mark scheme. FFL staff were engaged in developmental meetings with steering groups to plan the implementation of future work.

Activity in hospitals at Huddersfield and Halifax was more advanced. By early 2015 the catering provider was finalising the FFLCM bronze application. This followed work by a local steering group and support from the national FFL hospital pilot programme.

Mapping outcomes

As might be expected from a wide ranging and complex programme, the stakeholders we interviewed identified a wide range of outcomes. There are a number of options for grouping these outcomes. Given that the SROI methodology emphasises the involvement of stakeholders, the following outcomes are organised in relation to the main intended beneficiaries of the programme. Table 3 summarises main stakeholders and maps these against the outcomes identified through qualitative data collection.

Table 3: Mapping stakeholders to outcomes

Stakeholder	Outcomes
Schools (school children)	Curriculum development linked to local issues
	Improved behaviour of children in school
	Enriched school activities for children with SEN
	Children's improved wellbeing in school and readiness to learn
School teaching staff	Improved job satisfaction
Parents, carers and guardians	Improved relationship to school
	Improved health, wellbeing and readiness to learn of children
	Greater understanding and appreciation of the local environment
	Improved cooking skills at home - greater control and independence to make informed choices.
Community and voluntary groups / Local school community	School staff have an improved relationship to school community
	Parents & members of community support local social events
	More active, effective and efficient community and voluntary sector services
Local authority (Public Health), in partnership with NHS CCG under Health & Wellbeing Board	Habits established for good dietary health
	Children educated about healthy diets
	Reduced diet related inequalities in health
	Improved dental health of school pupils
School catering staff	Increased job opportunities or earning potential
	Improved workplace wellbeing and job satisfaction
LA Catering Traded Service	Improved reputation for professionalism, innovation and quality of school meals
	Better contract retention with schools
	Improved staff performance
	Secure investment (extra funding put into service to sustain long term service standards)

	Increased capacity to develop and implement sustainable procurement
	More secure business
Local suppliers (farmers, processors and wholesalers)	More secure businesses
	Greater access to other contract opportunities
	Profile in the local community
Local employees of suppliers	Local employment opportunities
	Increased job security
	Improved workplace wellbeing and job satisfaction
Central Govt (Dept. Work & Pensions)	Reduction in payment of unemployment welfare benefits
Environment	Reduced negative environmental impact of school food
	Reduced damage from carbon emissions
	Improved externalities from organic production, such as greater biodiversity
Early Years	Greater staff awareness of role of higher food and nutrition standards
Care Homes	Greater staff awareness of role of higher food and nutrition standards
Hospitals	Greater staff awareness of role of higher food and nutrition standards
	Communications plan and strategy for staff and patients on hospital food improvements
	Budget saving through reduced food waste
	Improved patient satisfaction with hospital food

Outcomes for school children: learning, behaviour in school, food habits, wellbeing

The outcomes for school children were a focus for interviewees although other parties, such as schools, were also perceived to benefit from the same changes in some cases. These ‘chains of events’ that link outcomes with different stakeholders are discussed later in this report.

While teachers, catering staff and those working in schools were able to provide a lot of specific examples, other interviewees such as food producers and suppliers and staff from local voluntary sector agencies also specified changes for children through the FFL programme. Most interviewees talked about ‘big picture’ outcomes such as better attitudes to healthy food, better behaviour in school – although others also identified quite specific changes in terms of skills and knowledge, for example for children with special educational needs. Some of the main themes are illustrated as follows:

“You know I think “Food for Life” says it all: it’s about giving children good food habits that last a lifetime.” [Calderdale, Primary Teacher #3]

“We are providing children with incredibly high standards of healthy, nutritious meals. Supporting our local schools in addressing children’s health and classroom attainment is at the core of what we do and [the silver FFLCM] is testament to that.” [Kirklees, Councillor 1, written statement]

“The children are really pleased to have their ideas listened to. [Through the SNAG] I’ve seen children grow in confidence in talking to other children.” [Kirklees, Primary Teacher 4]

“I’ve found we’ve been able to do some quite difficult topics through food-based lessons, for instance cooking lessons have been a great opportunity to compare food origins and learn about carbon footprints.” [Kirklees, Primary Teacher, 3]

“[The school garden and kitchen] are fantastic resources for the whole curriculum. They help bring subjects alive for some pupils.” [Giving an example of teaching French in the garden] [Kirklees, Secondary Teacher 1]

“The skills one of our students got [from cooking skills in school] directly helped him get an apprenticeship with a caterer.” [Calderdale, Secondary Teacher 1]

Because of the short duration of FFL work in some schools, some interviewees felt that they could not confidently identify outcomes for children, particularly with respect to dietary health or educational performance.

Outcomes for Schools and the Education Sector: benefits for children also bring benefits to schools

A key theme running through the feedback of teaching staff was that the benefits of the programme for children were similar to those for schools and the education sector more generally. That is, in cases where children obtain improved knowledge, attitudes and behaviour with respect to healthier and sustainable foods, the programme is also addressing the priorities of schools. However in some instances interviewees highlighted that these outcomes had distinct implications for schools as institutions, for example in terms of helping implement change, promoting the school’s public profile, or building school networks:

“We’ve been consulting children and that’s helped us make all sorts of changes [in a range of areas in the school not limited to food issues].” [Calderdale, Primary Teacher #5, written statement]

“Having FFL bronze has helped us prepare for Ofsted. It is an award that helps us tell a story about the educational culture of our school.” [Calderdale, Primary Teacher #3]

“We’ve invited visitors from the wider community to talk to the children and we now have links with another school who we are working along-side to develop a whole school understanding of sustainability.” [Kirklees, Primary Teacher #2]

Outcomes for teaching staff: improved job satisfaction

Most teachers we interviewed had a direct role in leading the FFL scheme within their school. For teachers themselves, the main theme to emerge was overall improved job satisfaction. This reflected the opportunity for some teachers to build upon their skills and interests in, for example, gardening or cooking. Others felt that FFL opened up alternative and creative opportunities for teaching their subjects through for example taking a practical and project based focus. The benefits for these teaching staff were general and pervasive through, for example, making work ‘more interesting’, ‘more fun’ or ‘less like hard work.’ Some interviewees felt that FFL helped with staff bonding and motivation for change:

“It has helped us bring staff together” [talking about teaching staff, assistants, caretakers and cooks] [Kirklees, Primary Teacher #1]

“FFL [award framework] has given staff confidence to lead change” [Calderdale, Primary Teacher, #3]

We explored potential negative aspects as well as positive outcomes of the programme. Less positive outcomes included additional work and responsibility associated with activities or the overall coordination of FFL across the schools:

“It feels like there is always something else to do and I’m a one man band. But paper work for FFL isn’t too onerous and they give lots of helpful pointers so I’d say I have to do about 15 minutes a month paperwork.” [Kirklees, Primary Teacher #1]

Outcomes for parents, carers and guardians: better relationships in school and home environments

Although we did not interview parents and the families of children, teaching and catering staff reported a range of outcomes for this group. Overall interviewees in primary school settings said that FFL was well regarded by parents. For example, FFL highlighted the importance of eating a healthy diet, cooking skills in the home, and understanding of food origins – all of which helped parents talk about or negotiate food choices in and out of school:

“Parents have said to me that their children are asking lots of questions about where food comes from. It’s been a good project for getting whole families involved” [Calderdale, Primary Teacher, #4]

“Practical activities like gardening are good for getting kids engaged in school. I think that does have a big knock on effect back at home” [Kirklees, Primary Teacher, #2]

Interviewees also identified better understanding and relationships with school through opportunities to take part in school food activities:

“We invited parents in to taste school meals week... This allowed space for the parents to sit and eat with the other children.” [Kirklees, Primary Teacher #5]

Other outcomes identified included the benefit to parents of the wellbeing and readiness to learn of their children. This contributed towards greater enjoyment of school – particularly during lunchtime periods – and willingness to attend school.

Outcomes for community and voluntary groups, and the local school community

FFL was reported to act as a useful framework for developing and cementing links between schools and local community and voluntary sector groups. These links arose out of food celebration events, school projects, local visits, food markets in schools and other efforts. Local groups and agencies benefited from these activities through funding donations, dissemination opportunities, and new connections– through for example introductions to parents willing to support local good causes:

“We have had well attended events with the majority of parents and the local community attending. We’ve got to meet people from local groups we didn’t know about, like the bee keepers club and the allotment society.” [Calderdale, Primary Teacher 2]

“[Work with FFL and] the William Henry Smith joint venture allows us to take food to the wider community with the pop up bistro as well as our parents visiting it at school.” [Calderdale, Primary Teacher #7, written statement]

“We’ve had local groups, business and farm shops invited in [to school] to sell their produce. It’s a good way to raise funds for a good cause.” [Kirklees, Primary Teacher #3]

Outcomes for the Local authority (Public Health), in partnership with NHS CCG

As commissioners and funders, members of the local authority public health teams in Calderdale and Kirklees had a number of outcomes that they anticipated from their FFL commission. At the point of the SROI fieldwork, evidence against performance indicators was emerging from 6 or 12

monthly monitoring and evaluation reports. These data are reviewed later in this report. Apart from specific outcomes linked to, for example school meal take up, the main observations from this group of stakeholders concerned the importance of systems, culture and population-based changes. These were expressed as both actual and anticipated outcomes:

“Food for Life is a vehicle into schools for other work we are doing – and this helps us promote other public health priorities.” [Kirklees, PH1]

“There is interest in embedding and going ahead with new frameworks for different settings.” [Calderdale, PH2]

“We are trying to get over the role of culture change for food in general, not just a narrow five-a-day message or the school meal take up message.” [Kirklees, PH1]

Other important public health priorities include action on reducing the prevalence of obesity and overweight in children and reducing the prevalence of dental decay, particularly for children in Early Years and Key stages 1 and 2. It was anticipated that the FFL commissions would support these goals however, in the short term, improvements such as changes in diet, were felt to be more appropriate outcomes linked to programme activities.

Outcomes for school cooks and catering staff: improved working conditions

School cooks participating in a FFL school cooks network, FFL training events or specific school FFL activities identified a range of outcomes. Those most commonly raised concerned the quality of working relationships, peer networking and the overall working environment:

“I now have a very active role in cooking club, tasting sessions...I’m getting listened to... I’m very proud of my kitchen.” [Kirklees, Primary Cook #3]

“[The training events are] really useful to hear other ideas.” [Kirklees, Primary Cook #1]

“Regular meetings with the management team and the food for life co-ordinator has been useful in helping all the staff understand the new school food standards and what is being included on the menu.” [Calderdale, Primary Cook #2]

“It’s just the sheer pleasure you see in the faces of children growing, cooking and then eating proper food.” [Kirklees, Primary Cook #2]

Some of these activities were perceived to have value in terms of professional development, respect in the workplace, improved pay and career opportunities. There was evidence that work pressures had increased, particularly since the middle of 2014, however it appears that much of this was linked to the introduction of the Universal Infant Free School Meals programme and associated working practices.

Outcomes for caterers

Changes for Kirklees Council Caterers are significant not least because of the scale of the catering operation and the numbers of schools and other contracts affected. Interviewees emphasised that the service has had considerable experience of innovation and quality improvement in school meals. This work preceded the adoption of the FFLCM at bronze and silver levels. Therefore it is important to carefully distinguish between those changes led by the catering team and those that can be attributed to FFL (both the schools award programme and the catering mark) in the period since 2012. Considering patterns of school meal take up, one interviewee highlighted the challenge:

“It’s difficult to pin point the role that FFL has had in improving take up in Kirklees. For us the catering mark has given us a structure. We’ve got a very good relationship with FFL. We need to continuously promote the service and FFL helps with this... If we hadn’t been working together the take up might not have been as high as it is.” [Kirklees Caterer #2]

This extract illustrates the role of the FFLCM scheme for reputational benefit, retention of custom and overall business security. Similarly the FFLCM was perceived to have a role in driving forward changes in procurement practices over the SROI evaluation period:

“These changes included sourcing Farm Assured meat, introducing Free Range eggs and Fairtrade products, and minimizing bought-in products and convenience items to ensure our menus reach at least 85% freshly prepared. We started using more seasonal items, and using organic pasta, oats, flour, yoghurts and carrots.” [Kirklees Caterer #1]

It is important to note that interviewees from the Kirklees Catering team also found that some in-house standards were higher than those originally adopted through the FFLCM. Nevertheless, as a nationally recognised set of standards, the FFLCM was reported to enhance the profile of the business and to maintain a competitive advantage over other catering businesses.

The large number of catering providers in Calderdale presented a challenge for research through the SROI interviews. However, the Calderdale Cooks Network and teacher interviews offered a basis for understanding the impacts of FFL on catering staff in schools and local supplier interviews offered a basis for documenting changes in procurement.

Outcomes for local suppliers (farmers, processors and wholesalers): business growth and opportunities

The food supply picture for Calderdale and Kirklees is complex due to the volume and changing dynamics of transactions, suppliers and purchasers. Commercial sensitivity and limited capacity to respond to research enquiries also put limits on the depth of the SROI analysis in this area. A number of farmers, processors and wholesalers did respond to requests for an interview and questionnaire survey. Most of the local suppliers were able to identify some important and tangible impacts on their business. These included new contracts, retention of contracts, overall improved business opportunities and wider social engagement:

“We now supply to 12 schools. They’re a maximum radius of 5 miles....All this is new business since the last 3 years....We’ve got the business through a link in the Calderdale school cooks network. It is about one third of our business.” [Calderdale, Supplier #1]

“We’re able to sell our mince beef to local schools at a price that can compete with the other big suppliers [in West Yorkshire] – whose mince might come from anywhere.” [Calderdale, Supplier #3]

“We’re starting to go from being ‘price takers’ to ‘price makers’ model for retail businesses. But it’s also not just about making money – it’s about making healthy food and seeing the bigger picture. So we supply free milk to breakfast clubs. We’ve hosted 250 free school trips [for children] to see a real farm in operation. I’m interested in the links that Food for Life have to offer my farm.” [Calderdale, Supplier #2]

“We’ve been able to cooperate better with the big suppliers – they are the experts and work at scale. [Although organic product lines are] in practice a small element of their

business, it's important for them because it means they can provide the whole package.” [Kirklees, Supplier #4]

“As demand has gone up we've had to invest in new facilities, warehouse, meeting hygiene standards.” [Kirklees, Supplier #6]

“[Larger scale contracts are] helping us get over the 'stigma' about organic. That organic is time-consuming to process, expensive or unreliable. They're learning. We're learning too about what orders we can and can't do.” [Kirklees, Supplier #4]

One area where suppliers reported having quite a limited impact concerned their opportunities to use school contracts to market their services to parents. Two suppliers to large caterers noted that school contracts were often 'secretive' – presumably on the grounds of commercial sensitivity – which in turn meant that parents and students were not informed about the identity of the supplier. This was less of an issue for small and highly local suppliers.

Outcomes for local food sector employment

Outcomes linked to local employment are closely linked to those for employers. However we have made the distinction in order to highlight the potential benefits of the FFL commissions for those not in employment, changing job or changing their working hours. All three of these areas were identified as outcomes by food sector employers and other parties, although we did not interview employees directly. Those employers willing to provide details were able to give specific information and a judgement of the extent to which changing employment patterns could be attributed to FFL activity:

“Business has been good. With me and the rest that's six jobs and I'd say most of them are off the back of our schools [and local authority] contracts.” [Kirklees, Supplier #4]

Outcomes for the environment

FFL seeks to have a positive impact on the environment through the adoption of sustainable farming and food production practices and reduced negative environmental impacts of school food and other catering provision. More specifically these changes are intended to lead to a variety of benefits such as enhanced animal welfare, reduced food wastage, reduced packaging, and reduced carbon emissions.

School staff interviewed were able to point to environmental practices taking place for example in terms of school meal waste monitoring and composting.

“We have four compost bins and try and recycle waste paper and fruit peelings from school. We are working towards our Eco School award so children are made aware of the importance of recycling.” [Calderdale, Primary School Teacher #6]

As this quotation illustrates, there was a good synergy between FFL and the objectives of the Eco Schools scheme in this area.

In terms of larger scale changes, the main area identified by caterers and suppliers was reduced transportation of food through local contracts. Other potential areas such as reduced meat and dairy consumption were a potential source of value for schools obtaining FFL's gold award – but were not clearly evidenced by interviewees reflecting on school menus in silver and bronze FFL settings.

Outcomes for early years and care homes

Early years work started in the second year of the SROI period of analysis. This is intended to further develop after the SROI period and, according to the FFL delivery team was not anticipated to deliver major outcomes for young children and their families in the start-up period. The main beneficiaries identified were early years staff who had attended FFL policy awareness and training sessions. These events proved popular and written evaluation feedback indicated that those attending gained useful professional development.

“So far we’ve focused on training and awareness raising. There has been massive interest 70 managers coming to a meeting led by us.” [Kirklees, FFL Staff 1]

Similarly with care home settings, FFL’s work has concentrated on training events and awareness raising activities. Work has also included an inter-generational initiative concerned with bringing together older people (through age UK) with children in schools. Whilst there has been important learning for FFL, this pilot work was not anticipated to deliver tangible outcomes for a substantial number of participants.

Outcomes for hospitals

Full details on the outcomes identified by hospital stakeholders can be found in our case study evaluation report on FFL’s new settings activity (Gray et al, 2015). There was consensus within CHFT that they have made good progress in several areas which had been identified as the immediate priority, but that there is much left to do. Areas where changes had been perceived were:

- Changes to menus and patient food service leading to improved quality of the meals consumed, particularly around quality of soups and sandwiches, and meal temperatures.
- Improved patient satisfaction, with fewer complaints about food.
- Improved training, morale and job satisfaction for catering staff.
- Reduced plate waste, particularly at Huddersfield hospital with the introduction of lighter menu options
- A structured plan in place to review contracts with suppliers, which is an important stage in making changing procurement practices.
- A strategy for communicating actions and progress with staff and patients

However interviewees emphasised that change would be a slow process. The most significant barrier to better food in hospitals was summarised by one stakeholder:

“Just the size and pace of a hospital environment, and the fact that food’s not always the most important thing; [there are] competing priorities.” [Calderdale, Hospital Steering Group 1]

The coincidence - in terms of timing and goals - of CQUIN and FFL pilot made it difficult to attribute impacts to either. One interviewee felt that whilst changes to food within the hospitals may have happened anyway, the adoption of the CQUIN and FFL pathfinder pilot has reaped wider benefits and accelerated change. Stakeholders felt that, while there were important potential rewards, new ways of working inevitably involved time, commitment and responsibility.

Summary and conclusions from the stakeholder interviews

Interviewees identified a large number of outcomes linked to the FFL local commissions. At this stage in the SROI analysis, it is worth noting their range and diversity. Some – such as the dietary changes - are more closely connected to the aims of the FFL programme, whilst others – such as

the changes to working practices for staff - are perhaps given less prominence in the programme blueprint.

Two further observations are, firstly, that some perceived outcomes are more short term and tangible than others and, secondly, that many outcomes are closely related or sequentially linked. These points feed through the next section that establishes which outcomes to include in the SROI analysis and identifies the evidence of outcomes.

The case study areas of Kirklees and Calderdale suggest some differences in terms of the outcomes for the two areas. Changes to the Kirklees catering model indicate impacts to a large number of schools, staff, pupils and suppliers –even in circumstances where the changes are small. In Calderdale, changes to the localised catering system are unlikely to be wide ranging in the authority, although this does not mean that there are not large scale effects for smaller groups. Due to differences in the local contexts, it is worth noting that the process for interviewee selection and data collection was somewhat different for the two case study areas, which makes a simple comparison inadvisable.

STAGE 3: Evidencing and valuing outcomes

Following consultation with stakeholders to identify the perceived outcomes of the programme, this stage involves the collection and identification of underpinning evidence. Where such information is available we then seek to put an appropriate valuation on the outcomes.

Sources of evidence

As discussed above, as an established programme FFL has a wide range of sources of information about delivery and potential outcomes. The following are some of the key data sources:

- FFL uses a CRM system for recording the progress of enrolled schools in relation to the FFL award, the FFLCM. Staff and students in schools record outcomes and report these back to FFL. FFL also keep records on the delivery of activities, such as training, and includes some reported outcomes, such as the perceptions of trainees.
- As part of the local commission, FFL undertake monitoring and evaluation of other aspects of programme delivery and this information is collated in periodic reports to the commissioners. Partner agencies, such as caterers and suppliers are also a source of data relating to the delivery of the programme.
- The hospitals have evidence from Healthwatch’s annual surveys on patient views of the appearance, taste and quality of meals (Healthwatch, 2015). The findings do not include data on improvements to health or nutrition, but are a useful source of information on patient experiences and suggested changes. In addition monthly reports to CHFT Board of Directors provide monitoring evidence against nutrition and hydration targets.
- The UWE-led evaluation undertook a survey of pupils and staff in a sample of FFL and non-FFL engaged primary schools. This assessed differences in diet, school food perceptions, cooking skills and overall school engagement with FFL type activities. This evaluation was supplemented with site visits during the course of the programme delivery and case study work on delivery settings. In addition to the UWE evaluation work, the BLF funded national evaluation led by Ecorys undertook a small scale baseline and follow-up study with two primary schools. This examined the impact of FFL-linked class based activities.

- Qualitative data captured by the perspectives of a range of stakeholders through interviews with project beneficiaries and stakeholders tell the stories of change experienced by project beneficiaries and enable outcomes to be explored further and to be valued.

External evidence of outcomes for the delivery of the FFL programme in other contexts and for the delivery of similar programmes provides a useful additional source of data.

Making a judgement on outcomes

When deciding on which outcomes to include in an SROI there are a number of factors to consider including the project objectives as well as the views of stakeholders. It is also important to consider whether the outcomes identified in the data should be considered as separate or intermediate outcomes in a chain of events – this is what is meant by the theory of change. Table 4 gives an illustration of how long term impacts can be the product of a chain of events.

Table 4: Example chain of events

Reasons for engaging with FFL	Immediate outcomes experienced	Outcomes measured through engagement with the programme	Longer term impact
Concern about the poor diets of pupils	Healthier menu options at lunchtime	Higher school meal take up	Improved child and wider family diets
Enriching pupil learning	More cooking lessons in school	Active SNAGs	Improved pupil attainment
Focus for staff development	Cooks feel more involved in school life	Staff positive feedback on training	Highly motivated school staff

At this point in the analysis it is useful to refer to the logic model developed by the FFL programme team during the course of the local commissions. This shows some of the key processes of change anticipated and also their range and diversity (see Appendix 7).

A key decision to make is what outcomes should be valued. This has been done by making a judgement about what is important and what is measurable. Every effort has been made to ensure that the decision process is transparent with explanations provided as to why outcomes have been included and why not.

Putting a value on outcomes

The purpose of valuation is to reveal the value of outcomes and show how important they are relative to the value of other outcomes. All value is, in the end, subjective. In SROI we use financial proxies to estimate the social value of non-traded goods to different stakeholders. By estimating this value through the use of financial proxies, and combining these valuations, we arrive at an estimate of the total social value created by an intervention. This step therefore involves identifying appropriate financial values for the outcomes experienced by project beneficiaries as a result of the FFL programme. Values are thus a way of presenting the relative importance to a stakeholder of the changes they experience.

For some outcomes identifying a value is relatively easy as there are clear, measurable cost savings often with nationally recognised indicators e.g. the cost of staff time. SROI also gives values to things that are harder to value so are routinely left out of traditional economic appraisal. There are several techniques available. For this SROI methods used drew where feasible on external data sources and the precedents established by other research in the field.

Negative outcomes

An SROI analysis should seek to fully take account of the cost of negative outcomes. A few potentially negative consequences of the programme were identified. These focussed particularly on the short term funding for the commission, and the impact of investing time and effort in developing the initiative. Potential negative outcomes included the following:

- Additional food ingredient cost
- Additional time (and thus cost) associated with new food procurement practices
- Additional costs associated with school-based practical food activities
- Displacement costs in which schools or other agencies are unable to address important issues because they are focusing on FFL related activities

Some of the costs associated with staff time are considered in this analysis as inputs, and have been factored into the analysis in the section above. Some negative outcomes were not clearly linked to FFL specifically and stakeholders highlighted some overlap and uncertainty about the role of multiple factors. This was particularly the case for displacement costs, which are examined further below, and it was therefore difficult to put a value on these concerns.

Outcomes and proxy values

We identified the final set of outcomes, indicators and financial proxies presented through stakeholder qualitative data analysis, quantitative data sources, and review of published SROI reports and economic analyses of relevance to the programme (see tables 5 and 6). Table 5 shows outcomes that we were not able to include in the SROI analysis due to the absence of evidence or difficulties identifying suitable indicators or financial proxies.

Table 5: Mapping outcomes, indicators and data sources

Outcome (by stakeholder)	Indicator	Sources of evidence
Schools and school children		
Curriculum development linked to local issues, such as local food production and services	Staff time spent in curriculum development work	Stakeholder interviews (primary schools only). FFL award applications Primary school pupil survey.
Improved behaviour in school	Reduced hours of staff time in behaviour management	Stakeholder interviews (primary schools only). FFL award applications
Enriched school activities for children with SEN	Number of hours children with SEN take part in FFL activities	FFL award application. Stakeholder interviews (primary and special schools)
Children's improved wellbeing in school and readiness to learn	Number of additional KS2 pupils: 'really liking' school meals + school lunchtime period + eating 5 FV a day + helping to cook	Primary school pupil survey
Improved awareness of healthy eating	-	Valued below under "Habits established for good dietary health"

Improved awareness of environmental sustainability	-	Valued below under “Greater understanding and appreciation of the local environment”
School teaching staff		
Improved job satisfaction and wellbeing at work	Reduced staff absence levels	Stakeholder interviews with primary school staff
Parents		
Improved relationship to school	Number of additional hours volunteering in school	FFL award applications. Phase 1 survey of parental volunteering in schools
Improved health, wellbeing and readiness to learn of children	Total number of days in time off work looking after children	Primary school pupil survey, recording those 'hating' school meals and lunchtime period.
Greater understanding and appreciation of the local environment	Time spent on educational trips to outdoor centres/ farms/children's centres	FFL awards applications
Improved cooking skills at home - greater control and independence to make informed choices.	Hours over one year freed up for parents.	Primary school pupil survey, recording helping to cook at home
Community and voluntary groups / Local school community		
School staff have an improved relationship to school community	Additional hours volunteering in the community (Equivalent to putting something back)	FFL award application. Stakeholder interviews (all schools)
Parents and members community support local social events	Additional hours volunteering in the community (Equivalent to putting something back)	FFL award applications. Phase 1 survey of parental volunteering in schools
More active, effective and efficient CVS services	Reduced CVS staff hours engaged in outreach work	Stakeholder interviews
Local Authority (Public Health), in partnership with NHS CCG under Health & Wellbeing Board		
Habits established for good dietary health	Number of children in KS2 meeting 5-a-day fruit & veg dietary guidelines	Primary school pupil survey
Children educated about healthy diets	Value of FFL LC as a health promotion campaign	Stakeholder interviews
Reduced diet related inequalities in health	Additional number of children in KS2 with FSME meeting 5-a-day fruit & veg dietary guidelines	Valued above under “Habits established for good dietary health”
Reduced deprivation in the LA area	Local economic impact of the FFL LC contract	Not valued separately from value to local suppliers (below)
Improved dental health of school pupils	Reduced dental caries or unplanned dental procedures with school pupils	Not valued. Insufficient data available
School catering staff		
Increased job opportunities or earning potential	Amount of reduced staff turnover valued by reduced recruitment and induction costs	School survey interviews. Training feedback forms. Stakeholder interviews

Increased job opportunities or earning potential	Staff gaining at least level 2 NVQ qualification	School survey interviews. Training feedback forms. Stakeholder interviews
Improved workplace wellbeing and job satisfaction	Number of staff members reporting improved wellbeing in the workplace	School survey interviews. Training feedback forms. Stakeholder interviews. Award applications
Caterers		
Improved reputation for professionalism, innovation and quality of school meals	Costs of a media campaign to achieve similar reputational gain	Stakeholder interviews with catering and service provider staff
Better contract retention with schools	Number contracts retained	Stakeholder interviews with catering and service provider staff
Improved staff performance	Days work lost from school catering staff absence	School survey interviews. Training feedback forms. Stakeholder interviews
Secure investment (extra funding put into service to sustain long term service standards)	Funds invested in service development	Not valued. Assumed to already embedded as part of the business development strategy
Increased capacity to develop and implement sustainable procurement	Avoided costs of staff training to create a similar impact	Stakeholder interviews with catering and service provider staff
More secure business	Number of school meals secured	Stakeholder interviews with catering and service provider staff
Local suppliers (farmers, processors and wholesalers)		
More secure businesses	Core business costs	Interviews and questionnaires with local supply businesses.
Greater access to other contract opportunities	Sales from new contracts to large institutional caterers	Interviews and questionnaires with local supply businesses.
Profile in the local community	Increased sales of goods and services direct to public in farm shops and other outlets	Interviews and questionnaires with local supply businesses.
Local employees		
Local employment opportunities	Number of new job FTE's created through food supply contracts	Interviews and questionnaires with local supply businesses.
Increased job security	Number of existing job FTE's retained through food supply contracts	Interviews and questionnaires with local supply businesses.
Improved workplace wellbeing and job satisfaction	Number of staff members reporting improved wellbeing in the workplace	Interviews and questionnaires with local supply businesses.
Central Govt (Dept. Work & Pensions) Reduction in payment of unemployment welfare benefits	Number of employees who gain employment or job security	Interviews and questionnaires with local supply businesses.
Environment		
Reduced negative environmental impact of school & hospital food	Reduced food waste	FFL / FFLCM applications and interview estimates
Reduced negative environmental impact of school food	Reduced consumption of meat and animal products	Insufficient evidence available

Reduced damage from carbon emissions	Reduction in greenhouse gas emissions, air pollution and congestion from local supply	Survey data from suppliers
Improved externalities from organic production	Savings in costs to environment of externalities	Insufficient evidence available
Early Years Greater staff awareness of role of higher food and nutrition standards in early years	Number of EY staff trained	FFL staff training
Care Homes Greater staff awareness of role of higher food and nutrition standards in care home settings	Number of care home staff trained	FFL staff training
Hospitals Greater staff awareness of role of higher food and nutrition standards in care home settings	Number of hospital staff trained	FFL staff training
Hospitals Communications plan and strategy for staff and patients on hospital food improvements	Achievement of FFCLM Award	FFL staff training
Hospitals Budget saving through reduced food waste	Food wasted (preparation, plate waste, unserved meals) expressed in number of patient meals	CHFT Reports. Caterer reporting on waste
Hospitals Improved patient satisfaction with hospital food		HealthWatch Survey

Table 6: Outcomes, proxy values and data sources for financial proxies

Outcome	Indicator	Financial proxy	Data source for financial proxy
Curriculum development linked to local issues	Value of staff time spent in curriculum development work	Cost per head of half day local authority area-based training session, based upon attendance of 10 trainees. Plus teacher cover supply costs	Cost half day in-school training session £30 per head. http://www.aqa.org.uk/professional-development/in-school-training .
Improved behaviour in school	Reduced hours of staff time in behaviour management	Cost of 1 day a year for one member of staff to address behaviour management issues in school.	£37.1 (average hourly cost of a member of staff to a school) x 7.5 hours = July 2015 http://www.payscale.com/research/UK/Job=Primary_School_Teacher/Salary
Enriched school activities for children with SEN	Number of hours children with social disadvantage or SEN take part in FFL activities	Hourly equivalent value of pupil premium $\frac{£935}{635} = £1.47$	Pupil premium. £935. Source: DfE 2014 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/283193/Pupil_Premium_CoG_2014-15.pdf School tuition hours per annum. 635. Source: OECD 2013 http://www.oecd.org/
Children's improved wellbeing in school and readiness to learn	Number of additional children in KS2: really liking school meals + school lunchtime period + eating 5 a day + helping to cook	Cost to a school of a school-based children's emotional wellbeing course per annum	http://www.globalvaluexchange.org/valuations/school-based-emotional-learning-programme-(cost-of-delivery-to-schools)/
Improved job satisfaction and wellbeing at work	Reduced staff absence levels	Cost of one day's absence to the school. 50% sick pay (Half of £278.25 =£139). Plus teacher supply cover: 7.5hours x£16 = £120. Total: £139+£120 = £259	1 day's absence from work at £37.10 x 7.5 is £278.25. http://www.payscale.com/research/UK/Job=Primary_School_Teacher/Salary

Improved relationship to school	Number of additional hours volunteering in school	Estimated from Average Hourly Rate £12.92 per hour in England	Based on average weekly wage of £413.59 between 2010 and 2015. ONS 2015
Improved health, wellbeing and readiness to learn of children	Total number of days in time off work looking after children	Cost of a day off work	Child & Family Care Trust (2015) Childcare Costs Survey 2015 For Yorks & Humberside. £64.14 per week & £115.54 based upon £12.84. Source: http://www.familyandchildcaretrust.org/sites/default/files/files/Childcare%20cost%20survey%202015%20Final.pdf
Greater understanding and appreciation of the local environment	Value of more time spent on educational trips to outdoor centres/farms/children's centres	Cost of trip to farm	Cost per child of an educational farm in West Yorkshire. £2 per head http://www.thebarnemsleys.co.uk/ . Plus vehicle hire At minimum of £68 per day. https://www.northgatevehiclehire.co.uk/personal-hire
Improved cooking skills at home - greater control and independence to make informed choices.	Hours over one year freed up for parents through children making independent contributions to cooking at home.	Cost child-minder after-school pick up	Estimated from average hourly wage in England (ONS 2013). http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2013-provisional-results/stb-ashe-statistical-bulletin-2013.html . http://www.volunteering.org.uk/component/gpb/is-there-any-way-of-measuring-the-economic-value-of-the-work-our-volunteers-are-doing
School staff have an improved relationship to school community	(Equivalent to putting something back) value of additional hours volunteering in the community	1 day (7.5 hours) of volunteering per annum. Based upon 2 staff in all 96 schools. 7.5 x 12.92=96.9	Average weekly wage of £413.59 between 2010 and 2015. ONS 2015
Parents and members community support local social events	Value of additional hours volunteering in the community (Equivalent to putting something back)	Hourly cost of volunteering time	Based on average weekly wage of £413.59 between 2010 and 2015. ONS 2015
More active, effective and efficient CVS services	Reduced CVS staff hours engaged in outreach work	Average hourly cost CVS staff time	Based on average weekly wage of £413.59 between 2010 and 2015. ONS 2015. plus 30% overheads and on costs
Habits established for good dietary health	Number of children in KS2 meeting 5-a-day fruit & veg dietary guidelines	Value to NHS, local and central govt. of diets per capita meeting nutritional guidelines	Joint FSA/DoH analysis for the Strategy Unit (2008); benefits of 5-a-day. The gap between estimated intake (HSE 2005) and target based on standard portion size.
Children educated about the healthy diets	Value of FFL LC as a health promotion campaign	Valued to caterers. Cost of a local authority commissioned media campaign	Lancaster et al (2008). No inflation assumed.
Increased job opportunities or earning potential	Reduced staff turnover valued by reduced recruitment and induction costs	Cost of recruiting and inducting a new employee	Institute for Research on Labour and Employment Survey (2012) Costs of Replacing Employees
Increased job opportunities or earning potential	Staff gaining at least level 2 NVQ qualification	Additional income per annum	£28x52 weeks http://www.globalvaluexchange.org/valuations/earnings-increase-gained-by-moving-from-no-qualification-to-at-

			<u>least-level-2-qualification-(as-a-percentage-of-income)/.</u>
Improved workplace wellbeing and job satisfaction	Number of staff members reporting improved wellbeing in the workplace	Cost of a multi-component intervention to promote wellbeing in the workplace.	Cost is estimated at £83 per employee per year. Http://www.pssru.ac.uk/project-pages/unit-costs/2014/
Improved reputation for professionalism, innovation and quality of school meals	Costs of a media campaign to achieve similar reputational gain	Cost of a local authority commissioned media campaign	Based upon Lancaster et al (2008) SROI report on FFL School Meals. No inflation factored in.
Better contract retention with schools	Number contracts retained	Average per annum value of school catering contract.	Kirklees Annual statement of accounts 2013/14. £13825,800 [90% of 2013/14 turnover] / 191 [total no. of schools includes the contract outside Kirklees]
Improved staff performance	Days work lost from school catering staff absence	High Cook /Primary Supervisor 1 day cost	G5 – SCP 15 £8.59 per hr. 1 day at 7.5hours = 8.59x£64.43 plus 30% overheads/on-costs = £83.75 Kirklees Local Authority. Catering Staff Payscales 2015
Increased capacity to develop and implement sustainable procurement	Avoided costs of staff training to create a similar impact	Per capita cost of half day group training	Estimated cost half day training session led by Focus on Food at £45 per head. http://www.focusonfood.org/school_cook_training . Basic cooks cover direct cost at £8.59 per hour = 4 hoursx£8.59=£34.36. therefore total per head = £45+£34.36= £79.36
More secure business	Number of school meals secured	Cost of a primary school meal to parents	Kirklees Council Catering Service website
More secure businesses	Core business costs	Aggregate business revenues reported by suppliers and producers accounted for by school meal (or other) FFLCM contract	Data provided by suppliers and producers
Greater access to other contract opportunities	Sales from new contracts to large institutional caterers	Value of new contracts	Data provided by suppliers and producers
Profile in the local community	Increased sales of goods and services direct to public in farm shops & other outlets	Value of new sales per annum	Direct data from suppliers
Local employment opportunities	Number of new job fte's created through food supply contracts	Starting annual salary for job in food industry	Starting salary for work in food industry. Example: baker. Source: https://nationalcareersservice.direct.gov.uk/advice/planning/jobprofiles/Pages/baker.aspx
Increased job security	Number of existing job fte's retained through food supply contracts	Starting annual salary for job in food industry	Starting salary for work in food industry. Example: baker. Source: https://nationalcareersservice.direct.gov.uk/advice/planning/jobprofiles/Pages/baker.aspx
Improved workplace wellbeing and job satisfaction	Number of staff members reporting improved wellbeing in the workplace	Cost of a multi-component intervention to promote wellbeing in the workplace.	Cost is estimated at £83 per employee per year. Http://www.pssru.ac.uk/project-pages/unit-costs/2014/

Reduction in payment of unemployment welfare benefits	Number of employees who gain employment or job security	Housing Benefit and JSA rates for a single person aged over 25 per year	£86.55/ week Housing Benefit & JSA https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/302150/dwp035-apr-14.pdf
Reduced damage from carbon emissions	Reduction in greenhouse gas emissions, air pollution & congestion from local supply	Value of reduced greenhouse gas emissions, air pollution and congestion measured by the social cost of carbon	nef (2008) FFL SROI study. No inflation factored in.
Greater staff awareness of role of higher food and nutrition standards in early years	Number of EY staff trained	Cost per head of half day LA area-based training session, rate based on attendance of 50 trainees.	Cost half day training session £20 per head. http://www.aqa.org.uk/professional-development/in-school-training .
Greater staff awareness of role of higher food and nutrition standards in care homes	Number of care home staff trained	Cost per head of half day LA area-based training session, rate based on attendance of 10 trainees.	Cost half day training session £40 per head. http://www.aqa.org.uk/professional-development/in-school-training .
Greater staff awareness of role of higher food and nutrition standards in hospitals	Number of hospital staff trained	Cost per head of half day LA area-based training session, rate based on attendance of 10 trainees.	Cost half day training session £40 per head. http://www.aqa.org.uk/professional-development/in-school-training .

STAGE 4: Establishing impact

Establishing impact involves identifying those aspects of change that would have happened anyway or are a result of other factors to ensure that this is taken out of the analysis. This is important as it reduces the risk of over claiming and means that the results are more credible. Key concepts within this stage are *deadweight*, *displacement*, *attribution* and *drop off*.

Deadweight

Deadweight is a measure of the amount of outcome that would have happened even if the activity had not taken place. It is calculated as a percentage.

One approach to calculate deadweight is to look at population level data. There is limited routine data available that is directly relevant to the FFL programme. One source is National Child Measurement Programme data, for the two local authority areas this shows a small decrease in overweight and obesity from 2011/12 to 2012/13, for example the Year 6 obesity level decreased from 19.9% to 18.4% in this period. Although these trends need to be interpreted with caution, it is possible that such population level changes indicate that some improvements in food and diet for beneficiaries may have happened without the FFL programme.

A further approach to estimating deadweight involves making comparisons with non-engaged settings. The implementation of FFL was available to all schools in the local authority area. Some schools have not engaged with the FFL programme and, although they are not strictly a control group, they act as a basis for comparison with actively engaged schools. Lead staff from a sample of 10 FFL engaged and 9 non-engaged primary schools (respectively: 5, 5 in Kirklees; 5, 4 in Calderdale) were asked to report activities related to food reform in schools. These included activities involving cooking, growing, farm visits, school food policies, sustainable food education and the involvement of pupils and students.

The results showed that, for all of these activities non-FFL schools were less likely to show evidence of engagement. The results suggest that practical changes such as training, accessing new providers, changes to food related activities in schools would only have happened to a very limited extent.

In hospital settings there has been ongoing work to improve food and nutrition standards. However national evidence suggests that these initiatives have struggled to make an impact in the sector.

Drawing upon these sources of evidence we have applied a deadweight value of 20% which is a value somewhat higher to that used in other similar SROI evaluations.

Displacement

Displacement is another component of impact and is an assessment of how much of the outcome displaced other outcomes. For example, has the increased school staff and student involvement in FFL meant that they have stopped other educational activities or doing other things with a social value? Interviews with stakeholders and beneficiaries revealed very limited evidence of displacement.

Some stakeholders said that without FFL they would not have been able to effectively organise a coherent set of activities around all aspects of food in school. This implied that rather than displacing other activities, FFL – and the training and framework – helped staff become more active and more effective in their work.

The evaluation did highlight some possible overlap between other aspects of school life including other wellbeing, health promotion and community engagement activities. This did not appear to be too significant in terms of stopping these activities from taking place.

In the context of hospitals, measures to improve catering services are unlikely to have displaced other activities. Although it is possible that action in this area has deflected attention from other hospital improvement priorities.

Given that there is potential for displacement linked to FFL activities, we calculated this at 20% for most outcomes.

Attribution

Attribution is an assessment of how much of the outcome was caused by the contribution of other organisations or people. Attribution is calculated as a percentage (i.e. the proportion of the outcome that is attributable to the organisation).

It shows the part of deadweight for which there is better information and where outcomes can be attributed to other people or organisations. Information was gathered from participating and non-participating schools through questionnaires and interviews.

As described above a range of other services and agencies in addition to FFL support schools in food related activities. However, all these other initiatives are somewhat different from FFL and, for example, target specific at risk groups or have a general focus on healthy lifestyles. Nevertheless, following the local partnership frameworks, there is little doubt that these initiatives are likely to have supported or enhanced the work of FFL, a number of which are listed in Figure 1.

Figure 1: Activities that may have contributed towards outcomes

<p>Sustainable Schools Eco Schools Green Flag scheme RHS Grow Your Own Tesco Farm to Food Morrison’s Let’s Grow Vouchers Sainsbury’s Active Kids Voucher Scheme Let’s Get Cooking Universal Infant Free School Meals School Food Plan for school meal take up Hospital CQUIN</p>	<p>Forest Schools Shake Up Wake Up Phunky Foods Incredible Edible Fairtrade Fortnight Healthy Eating week LA Active Leisure scheme FINE (targeted dietary intervention) Catering marketing and promotions LA Capital Investment in Catering Facilities Local awards, e.g. Halliwell Award</p>
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Discussions with stakeholders highlighted the benefits they saw for their services, with many feeling that the FFL programme helped them to engage with other activities, for example schools used their FFL activities support their application for the Halliwell Award. In turn, achieving this local sustainability award helped schools fast track towards the FFL silver award.

In selecting outcomes and financial proxies to include in the SROI we made efforts to take into account what proportion of change it would be reasonable to assign to FFL alone. Given measures to take into account attribution within the proxies themselves, and reflecting on values for attribution used in similar SROI calculations a range from 20 to 50% was estimated for attribution.

Drop-off and discounting

Drop-off is used to account for the fact that the amount of outcome attributed to the project is likely to be less or, if the same, will be more likely to be influenced by other factors in future years. It is only calculated for outcomes that last more than one year.

Since FFL is concerned with food *for life* there is no question that the programme seeks to have impacts over the lifespan of pupils. External evidence indicates that behaviours and routines adopted at a young age do carry forward into adulthood. However over time it becomes increasingly difficult to judge the role of a single initiative in the lives of individuals. This report therefore focuses on the shorter term impacts and estimates drop off rate of 50% for most outcomes

In terms of discounting, the HM Treasury Green Book² recommends that costs and benefits occurring in the first 30 years of a programme, project or policy be discounted at an annual rate of 3.5%. We followed this discount rate for a three year period where the outcome is anticipated to last more than one year. Further sensitivity testing is applied later in this analysis to assess the implications of this judgement.

Calculating the impact

This stage involves adding up all the benefits, subtracting any negatives and comparing the result with the investment.

² The HM Treasury Green Book <https://www.gov.uk/government/publications/green-book-supplementary-guidance-discounting>

Impact for each outcome is calculated as follows:

- Financial proxy multiplied by the quantity of the outcome gives a total value.
- Deduct any percentages for deadweight, displacement or attribution. These outcomes were estimated as follows:
 - Deadweight: 20%
 - Displacement: 20-50%
 - Attribution: 20-50%
- Repeat for each outcome (to arrive at the impact for each)
- Add up the total (to arrive at the overall impact of the outcomes included)

STAGE 5: Calculating the SROI

The sections above present all the information required to calculate an SROI. This final section summarises the financial information recorded in the previous stages to provide the financial value of the investment and the financial value of the social costs and benefits.

Net Present Value

The SROI ratio is based on calculations from the outcome data available from the range of beneficiaries who received an intervention in the 24 months of the FFL programme and, similarly, includes information about outcomes for no longer than 36 months after the commissioned work began. SROI allows value of the change in future years to be projected and the value over all projected years totalled.

Analysis of school survey and other sources of data recorded at 24 months after the start of the intervention suggested that for many actors (students, staff, schools, suppliers etc.) the changes had become consolidated. However numbers included in these analyses are all based upon samples and the triangulation of different data sources. It is possible that some of the impacts observed will last in to the future and therefore continue to be of value to participants and the wider community.

Calculating the Social Return on Investment Ratio

The social return is expressed as a ratio of present value divided by value of inputs.

$$\text{SROI ratio} = \frac{\text{Present Value}}{\text{Value of inputs}}$$

The net social return divides the net present value by the value of the investment.

$$\text{Net SROI ratio} = \frac{\text{Net Present Value}}{\text{Value of inputs}}$$

Sensitivity analysis

The calculations above are based on a great number of assumptions. Sensitivity analysis allows these assumptions to be tested to assess the extent to which the SROI results would change if some of the assumptions made in the previous stages were changed. The aim of such an analysis is to test which assumptions have the greatest effect on the model.

Repeating the analyses with changes to estimates of deadweight, attribution and drop-off indicates that substantial changes would have to be made to the assumptions in order for the ratio change from positive to negative. These calculations show that even when significant

changes are made to the analysis the results still show clear evidence of social value being created up to 3 years after the FFL intervention.

To develop the sensitivity analysis it is informative to apply the same impact assessment model used by NEF (Kersley & Knuutila, 2011) in the study on FFL catering reforms in schools. The NEF estimates were:

Duration:	5 years
Deadweight:	20%
Displacement:	5%
Attribution:	25%
Drop off:	75%

When these estimates were applied to the data the SROI ratio remained very similar in both Calderdale and Kirklees (see sensitivity analysis tables below). This suggests that our model for assessing impact followed a similar format to that used in the NEF study and, bearing in mind important differences of context and scope, provides some basis for comparisons.

Outcomes for stakeholders

The outcomes with the relatively highest values relate to the local food economy and local employees. A related outcome concerns the value of the programme for caterers and their employees -including school catering staff. The educational benefits, which are attributed to schools in this analysis but could equally be allocated to school children themselves, account for about a fifth of the value. The partnership of the local authority public health and CCG (NHS) are beneficiaries in terms of the anticipated population health benefits. As with education, children themselves could also be presented as the parties that ultimately stand to gain in this respect.

SROI Calculation for the Food for Life Commission in Kirklees

Inputs, total present value and net present value

For a 24 month period of the local commission, the value of the total inputs was calculated at £196,803. Deducting the total input provides the Net Present Value (NPV) as set out in the following table.

Net Present Value calculation: 24 months investment, social value created for up to 3 years (36 months)

Kirklees	Year 1	Year 2	Year 3	
Input (24 months)				£196,803
Present value of each year	£617,596	£2696,683	£148,342	
Present value of each year after discounting	£596,710	£276,957	£133,796	
Total Present Value (PV)				£1,007,464
Net Present Value (PV minus the investment)				£810,661

Social return *The social return is expressed as a ratio of present value divided by value of inputs.*

$$\text{SROI ratio} = \frac{\text{Present value } \underline{\underline{£1,007,464}}}{\text{Value of inputs } \underline{\underline{£196,803}}}$$

For FFL programme the ratio is 1:5.12. This means that the analysis estimates that for every £1 invested in FFL there is £5.12 of social value created.

Net social return *The net social return divides the net present value by the value of the investment.*

$$\text{Net SROI ratio} = \frac{\text{Net Present Value } 810,661}{\text{Value of inputs } 196,803}$$

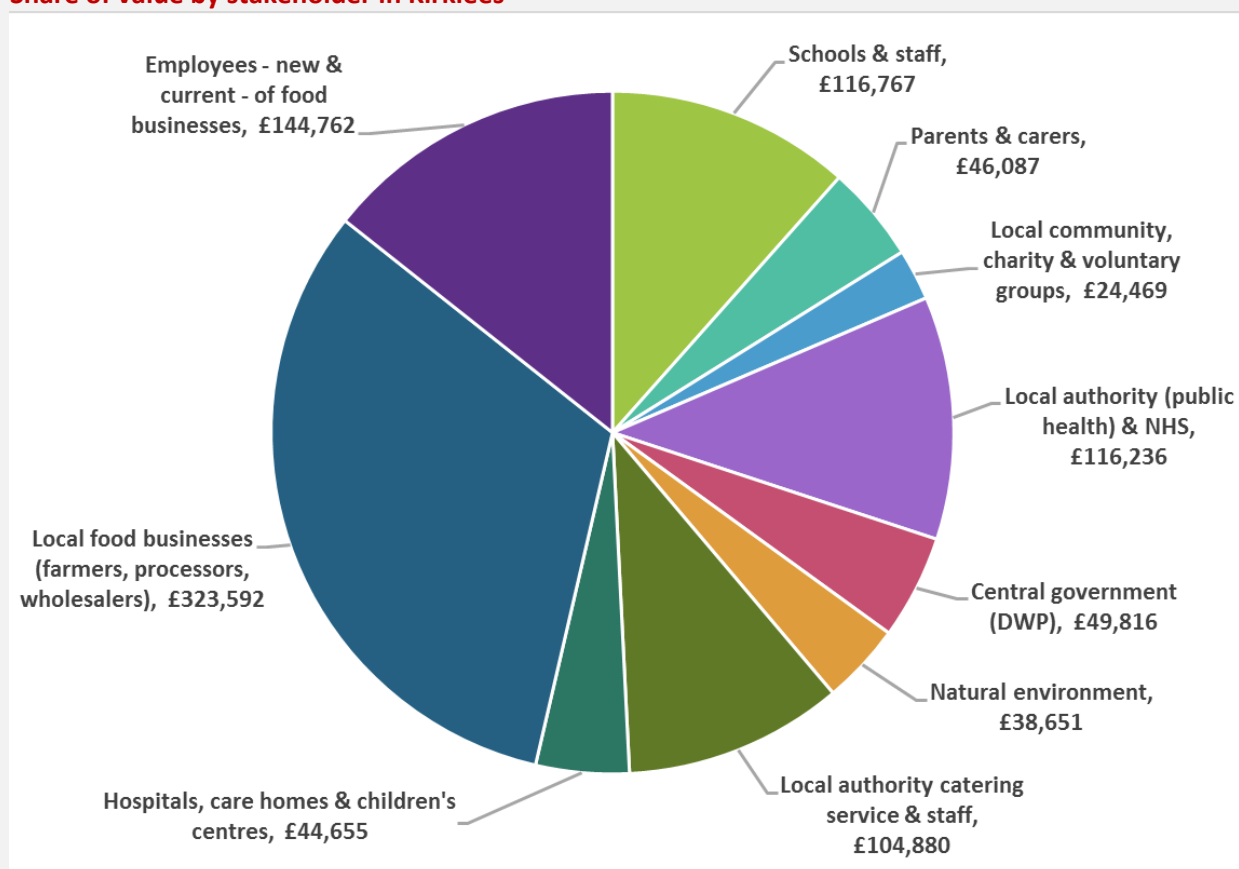
For FFL the ratio is 1:4.12. This means that the analysis estimates that for every £1 spent on FFL there is £4.12 of social value created.

Sensitivity analyses

Sensitivity Analysis	Social Return Ratio
Findings from analysis	£5.12
Increasing deadweight to 50%	£3.16
Increasing displacement to 50%	£3.18
Increasing attribution to 50%	£3.60
Changing drop-off to 10% for all outcomes	£7.51
As above, drop-off 75%	£4.03
Halving all values of outcomes/beneficiary numbers	£2.56
Removing all dietary health-related outcomes	£4.56
Impact assessment using New Economics Foundation model* for duration, deadweight, displacement, attribution & drop off	£5.08

* Kersley & Knuutila, 2011

Share of value by stakeholder in Kirklees



SROI Calculation for the Food for Life Commission in Calderdale

Inputs, total present value and net present value

For a 24 month period of the local commission, the value of the total inputs was calculated at £198,894. Deducting the total input provides the Net Present Value (NPV) as set out in the following table

Net Present Value calculation: 24 months investment, social value created for up to 3 years (36 months)

Calderdale	Year 1	Year 2	Year 3	
Input (24 months)				£198,894
Present value of each year	£453,441	£214,864	£107,432	
Present value of each year after discounting	£438,107	£200,578	£96,898	
Total Present Value (PV)				£735,582
Net Present Value (PV minus the investment)				£536,688

Social return *The social return is expressed as a ratio of present value divided by value of inputs.*

$$\text{SROI ratio} = \frac{\text{Present Value}}{\text{Value of inputs}} = \frac{£735,582}{£198,894}$$

For FFL programme the ratio is 1:3.70. This means that the analysis estimates that for every £1 invested in FFL there is £3.70 of social value created.

Net social return *The net SROI ratio divides the net present value by the value of the investment.*

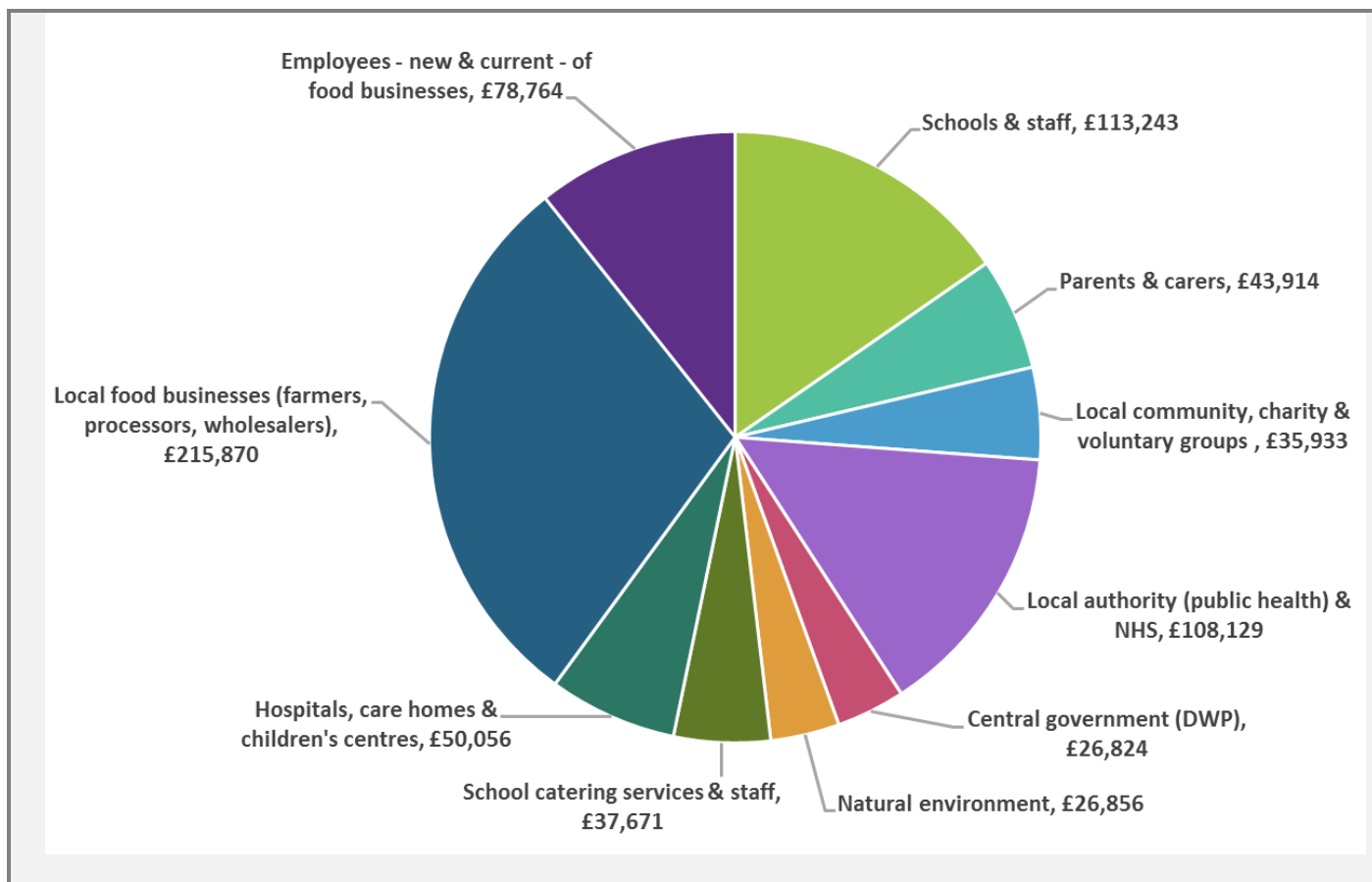
$$\text{Net SROI ratio} = \frac{\text{Net Present Value}}{\text{Value of inputs}} = \frac{536,688}{198,894}$$

For FFL the ratio is 1:2.70. This means that the analysis estimates that for every £1 spent on FFL there is £2.70 of social value created.

Sensitivity analyses

Sensitivity Analysis	Social Return Ratio
Findings from analysis	£3.70
Increasing deadweight to 50%	£2.33
Increasing displacement to 50%	£2.89
Increasing attribution to 50%	£3.06
Changing drop-off to 10% for all outcomes	£6.91
As above, drop-off 75%	£3.48
Halving all values of outcomes/ beneficiary numbers	£1.85
Removing all dietary health-related outcomes	£3.18
Impact assessment using New Economics Foundation model for duration, deadweight, displacement, attribution & drop off (Kersley & Knuutila, 2011)	£3.75

Share of value by stakeholder in Calderdale



Synthesis of the SROI calculations for the two case study areas

It is useful to provide a synthesis of the SROI calculations for the two case study areas given that we adopted the same methodology; identified similar outcomes, data sources and financial proxies; and studied very similar versions of the same programme delivered in two neighbouring local authorities. Stakeholders also reported synergy and collaboration between the two local commissions with regard to, for example, staff training, food procurement and hospital settings work.

The combined financial value of the inputs for the two case studies is £395,697 and the total present value is £1,743,046. This provides an SROI ratio of £4.41 of social value created for every £1 of investment.

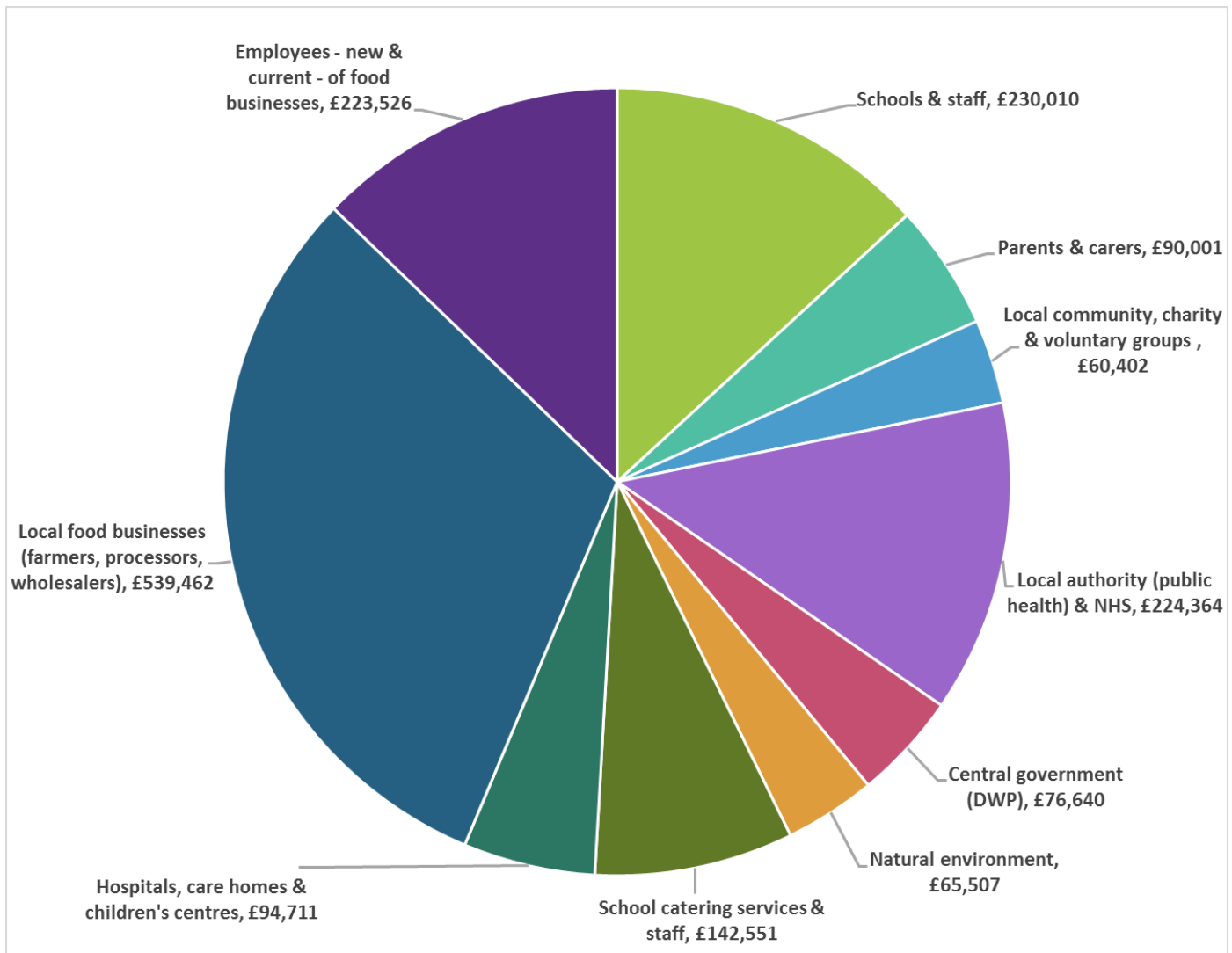
Sensitivity analyses combined for the two studies shows a convergence in the clustering of results in the range of £3 to £4 (see table below).

Sensitivity Analysis	Calderdale	Kirklees	Two case studies combined
Findings from analysis	£3.70	£5.12	£4.41
Increasing deadweight to 50%	£2.33	£3.16	£2.75
Increasing displacement to 50%	£2.89	£3.18	£3.04
Increasing attribution to 50%	£3.06	£3.60	£3.33
Changing drop-off to 10% for all outcomes	£6.91	£7.51	£6.29
As above, drop-off 75%	£3.48	£4.03	£3.75
Halving all values of outcomes/ beneficiary numbers	£1.85	£2.56	£2.21

Removing all dietary health-related outcomes	£3.18	£4.56	£3.87
Impact assessment using New Economics Foundation model	£3.75	£5.08	£4.41

The following chart shows the distribution of value by stakeholder group.

Share of value by stakeholder for the combined case studies



STAGE 6: Reporting, using and embedding

A draft version of the SROI report was presented at meetings in Calderdale and Kirklees, both on the 19/10/15 with three representatives from the local authority public health teams. A further draft was then presented to 13 FFL Local Commission Pathfinders (local authority commissioners and a Big Lottery Fund representative) on 26/01/16.



Stakeholder consultation workshop on the SROI results. Huddersfield, February 2016

A larger consultation event was hosted in Kirklees at the University of Huddersfield on 15/02/16 as part of a local food strategy planning event. This was attended by over 40 delegates with backgrounds in food production, supply, retailing, catering, the community and voluntary sector, local government and FFL local programmes. Many delegates had been interviewed as part of Stage 2 in this study. Following a presentation, the report was discussed in two 40 minute workshops. The discussions were stakeholder led with a facilitator. Central areas for discussion were the areas of valuation, the monetisation of value, possible omissions from the report and the implications of the report for local strategy. The report, overall, was very positively received with no major areas for revision suggested. Some examples of the feedback confirm the valuation of less tangible outcomes, and point towards additional sources of value:

“I thought it was really interesting to hear that you put some value against the mental wellbeing aspect of it [FFL]. It could have been something you left out, but it made a lot of sense to include this” [Delegate #1, Kirklees Consultation Event 15/02/16]

Food for Life’s work with the Senior Management Teams in schools has really helped us obtain work with schools – so yes I think these are the sorts of benefits [of FFL] that need to be recognised.” [Local Voluntary Sector Delegate #2, Kirklees Consultation Event 15/02/16]

“I can see that there are other benefits that aren’t included in the report. [For example] improving school gardens gives kids pride in their school and can lead to reduced vandalism.” [Delegate #3, Kirklees Consultation Event 15/02/16]

Delegates were invited to provide feedback after the event. A member of the FFL programme team subsequently identified a further potential input:

"There was an additional project funded through the Big Lottery that took place in Calderdale and Kirklees during this period – it was an intergenerational linking project where Age UK was funded to provide a project officer to create links with schools for older volunteers. Our LPMs in Calderdale and Kirklees supported this project. Should we add some of this cost to the figure [i.e. input]?" [FFL Manager]

We decided that it would not be possible to formally include Food for Life's intergenerational project within the current SROI analysis primarily because, at the point of reporting, it was too early to collect evidence on the impacts of these activities. Nevertheless it is worth noting that the anticipated impacts of the intergenerational project have similarities with those of the wider programme activities in the two case study areas. This implies that the intergenerational project would create similar forms of social value for health and wellbeing of older people, children, volunteers and staff in care homes and schools. Furthermore, the intergenerational project exemplifies how Food for Life addresses food, cooking and growing needs that bridge stages of the lifecourse and agency settings. So we could anticipate that the intergenerational project would support 'systemic' forms of social value derived from, for example, new partnerships and economies of effort between volunteers, agency staff, caterers from different sectors and members of the local community.

This SROI report includes a large amount of qualitative, quantitative and financial information which will be useful to FFL, Big Lottery Fund, commissioners and service providers. The section below sets out conclusions and recommendations based on the learning gained from undertaking this research and should be relevant to all stakeholders. This feedback is part of an ongoing process of embedding learning. In both Kirklees and Calderdale local food partnerships will be drawing upon the report to inform their work.

DISCUSSION, RECOMMENDATIONS & CONCLUSIONS

Overview

This study suggests that FFL is valued by schools, civil society, local business and wider stakeholders as a locally commissioned programme in local authority areas. The SROI provides a financial measure of this value; that for every £1 spent on FFL there is between £3 and £5 of social value created. The sensitivity analysis showed that the range of values was closely clustered around this range, which provides confidence about the validity of the findings.

Stakeholders interviewed identified a number of positive outcomes linked to the local commission. There was little evidence that contact with FFL was displacing contact with other projects, services and agencies. In fact interview findings suggested the opposite; that support from FFL staff helps promote integration with other services in the area. The proactive approach of the FFL programme teams in partnership working were strong themes running through the interviews.

Value to stakeholders

As the charts set out in the previous section illustrate, Food for Life local commissions have an impact on a wide range of stakeholders. This SROI analysis found that Food for Life local commissions deliver tangible benefits to schools (and the educational sector more widely); health agencies and their strategic partners; community groups and other voluntary agencies; and caterers and local food businesses. Children, parents, patients and local communities obtain benefits to their health, educational, personal and economic wellbeing. These benefits can be expressed in terms of a social value between £3 and £5, for every £1 invested by national and local sponsors.

Some of the value created through Food for Life can be anticipated from the contracts set out in the local commissions for the case study areas. These refer to the impacts on food catering, leadership, education and involvement. As discussed below, other forms of value might be expected from previous research – particularly the 2011 SROI study led by the New Economics

Foundation (NEF) – on the role of the FFL Catering Mark in the local food economies. Perhaps one surprising feature of the current SROI study was the role of Food for Life in supporting the working practices of teaching and catering staff. Some of this took the form of curriculum support, skills development, expert support and networking opportunities. Other outcomes - albeit less tangible - were reported to carry equal weight, including the role of FFL in promoting enjoyment and a sense of accomplishment at work. Some senior leaders in schools, catering agencies and other settings felt that the link between positive food culture and staff wellbeing was not a peripheral benefit, rather it underpinned a productive and high performing workplace.

Any summary of these impacts inevitably simplifies a complex picture. Knowledge, skills and activities developed by staff in schools, hospitals and catering agencies are both of personal benefit and contribute towards the effectiveness of their respective organisations – which in turn impact on service users. The links here are interactive and systemic in character so that some benefits, such as those which might be described as ‘capacity building’, are greater than the sum of the parts. This study also shows that a number of outcomes cannot be straightforwardly linked to stakeholders. Most importantly, although children are the central intended beneficiaries of the school and early years Food for Life programme, there are some good reasons to consider them as ‘non-economic actors’ who are not accorded financial value. Therefore children (and other service users for other settings) are best understood as the primary, or ultimate, stakeholder for whom outcomes are mediated by other groups.

Similarly the outcomes for the natural environment can be presented in a number of ways, given that social and economic outcomes will have an indirect impact. In this analysis we have followed the conventions set by earlier research (Kersley & Knuutila, 2011; Lancaster et al, 2008) and separated out some key impacts that relate to ecosystems, biodiversity and climate change. Improvements in reduced food wastage and reduced transportation were the main environmental benefits that we were able to quantify. We did not locate evidence of reduced meat and dairy consumption, although this is a potential area of considerable value where agencies move towards the gold FFL awards. Further forms of value would be linked to sustainable and organic farming methods, such as increased biodiversity. As other SROI studies have found, these are difficult to quantify at the scale of a local authority commission in the long term. A scaled up analysis of the national FFL initiative, and particularly the FFLCM, could provide an evidence platform to examine these impacts more clearly.

The case study areas: similarities and differences

Kirklees and Calderdale case study areas illustrate important features of FFL local commissions including the role of grass-roots networks, coordinated local food strategies and different catering models. They also show how work is extending from schools into the new settings of hospitals, early years and care homes. As adjacent local authorities the two areas also acted as a basis for understanding the social value of FFL across local authorities at a sub-regional level.

There are many similarities between the two case study areas in terms of the outcomes identified and the range of stakeholders benefiting from the programme. Our initial review of all FFL local commissions in England suggests that a similar range of outcomes can be anticipated in other areas, especially where the programme is directed at all schools and engages with other settings such as children’s centres and hospitals.

There are some differences between the two case studies. The SROI ratio for Calderdale (£1:3.70) is lower than that for Kirklees (£1:5.12). A number of reasons could account for these differences:

1. The pupil and other populations of Kirklees are about twice those of Calderdale. This means that potential reach and scale of the programme in Kirklees is significantly greater than that of Calderdale.
2. The catering systems are very different. The local authority caterer in Kirklees has contracts with nearly all schools in the authority and holds the Silver Food for Life Catering Mark. Large numbers of stakeholders are therefore affected by changes in FFLCM-related practices. By contrast reforms to school catering in Calderdale are more heterogeneous and less systemic across all schools.
3. It is possible that the Calderdale programme creates similar value to the Kirklees programme. However the availability of evidence, suitable indicators and appropriate financial proxies was more difficult in the case of Calderdale than that of Kirklees.

These factors show that it is not advisable to make crude comparisons between the two areas, without first taking into account the different local contexts. However the sensitivity analysis provides a useful basis for determining the minimum and maximum returns across the two areas. This shows that the most conservative estimate for both cases produces a positive return on investment of £1:1.85. Meanwhile, the maximum SROI ratio for both cases is £1:7.51.

The findings in the context of other SROI research

Although it is not appropriate to make simple comparisons between SROI studies, some themes emerge from this study when put in the context of other SROI analyses of Food for Life and similar programmes.

This study found a somewhat higher ratio than the NEF study of FFL food procurement by local authority caterers in Nottinghamshire and Plymouth (Kersley & Knuutila, 2011). This might be anticipated given that our research factored in a wider range of educational, health, civil society and organisational outcomes – areas for which evidence was not available at the time of the Kersley and Knuutila study. The NEF study examined impact over a 5 year period, whereas this study primarily focused on impact for 3 years in order to provide evidence of relevance for short term commissioning cycles. Our sensitivity analysis, however, found these differences had little overall effect on the SROI ratios.

Further differences are inclusion of programme commission and staff time costs in this study. We also avoided factoring in general changes that were in line with the FFL approach, such as the procurement changes by caterers that had occurred prior to the commissioning period and could not be clearly attributed to Food for Life. These decisions mean that the current study is likely to present a more parsimonious account of value than that of the NEF study.

Our study contrasts with that of Lancaster et al's SROI analysis (2008) in East Ayrshire in that we used fewer assumptions about the long term economic, health and educational impacts of the programme. We also had access to a greater depth of local empirical data to support judgements on the exposure and scale of the impacts of stakeholders. The combination of longer term forecasting and assessment based on a longer period of programme delivery may account for the higher SROI ratio found by Lancaster et al than that of our research. It is also important to note that Lancaster et al's work took place in a different time and place: the school food context in Scotland between 2003 and 2008 is not the same as that of England between 2013 and 2015.

Strengths and limitations of this study

There are a number of strengths to this research. It builds upon the principles and methods adopted in previous SROI research. We gathered the perspectives of a large number and variety of stakeholders and used this information to underpin the analysis of outcomes. A considerable

body of data was available on the Calderdale and Kirklees Food for Life local commissions, their implementation and context. The study benefited from the availability of well recognised and established financial proxies for many of the outcomes.

FFL delivered the programme alongside a range of other initiatives. In order to avoid over-claiming on the role of the programme in creating change we sought to ensure that we factored in the role of other initiatives such as the School Food Plan and Universal Infant Free School Meals programme, locally authority investments in catering, and a number of national and locally led NGO projects in the areas of nutrition, physical activity and environmental studies. Some potential areas of value were excluded from the analysis because we could not attribute them to the programme with confidence.

Given the complexity of the programme and its delivery context one of the challenges concerned creating an account that adequately captured the scope and breadth of the impacts. This placed limits on the resources available to collect comprehensive data across all outcomes. Some stakeholders declined to provide detailed data, probably due to issues of time, motivation and business sensitivity. Long term health, educational development and the natural environment are all areas of outcome that represent major challenges for valuation. In this report, we have sought to provide estimates for these areas on the basis that their omission simply reinforces a narrow cost-benefit accountancy in commissioning and strategic planning.

Recommendations

To make the most of the SROI findings from this study, it is important to have further dialogue with stakeholders both in the local authority case study areas and with others such as experts in the Food for Life local commission pathfinder group. These parties can advise on the credibility of the results and how they can be used to inform decision making.

With the completion of a number of SROI analyses linked to the FFL programme, there is now the basis for simplifying and refining the model for future SROI evaluations of FFL, the FFLCM and related initiatives. Where resources are available, this would allow SROI reporting on future local commissions and innovative projects. A scaled-up SROI analysis of the FFLCM or multiple FFL local commissions would provide a stronger evidence platform to analyse the environmental outcomes of FFL.

Stakeholders perceive the 'wellbeing' benefits of transforming food culture to be central to the programme. Conventional monitoring and evaluation approaches often struggle to quantify these benefits. This SROI study has enabled an account of some of these less immediately tangible outcomes. In so doing it creates a platform for expressing other important forms of value such as the health and educational benefits of the programme. The SROI findings can therefore be used to communicate in summary terms the value of the whole settings and system change aspirations of the programme.

Conclusion

This study found that FFL is valued by schools, civil society, local business and wider stakeholders as a locally commissioned programme in local authority areas. The SROI provides a financial measure of this value: that for every £1 spent on FFL there is social value of £4.41 created over a three year period. In the analysis, multiple adjustments to the role of different outcomes and other factors shows that the social value is likely to fall between a lowest estimate of £2.21 and a highest estimate of £6.29. The clustering of values around a narrow range of £3 to £4 lends confidence to the validity of the results.

The methods and findings from this research are significant for other Food for Life local commissions, the Food for Life Catering Mark and other area-based food programmes, such as the Sustainable Food Cities initiative, both in the UK and internationally. In many instances, the bottom-up research method places limits on the generalisability of SROI results. However in this study the close correspondence with other SROI studies in terms of methodology and findings suggests that a similar range of outcomes can be anticipated in other areas where an FFL-type programme model is implemented, especially where the programme is directed at schools and public service catering - and engages with other settings such as children's centres and hospitals.

REFERENCES and BIBLIOGRAPHY

Arvidson, M., Lyon, F., McKay, S., Moro, D. (2010) *The ambitions and challenges of SROI*. Birmingham: Third Sector Research Centre.

Au, N. (2012) The Health Care Cost Implications of Overweight and Obesity during Childhood. *Health Services Research* [online]. 47 (2), pp. 655-676.

Banke-Thomas, A. O., Madaj, B., Charles, A., & van den Broek, N. (2015). Social Return on Investment (SROI) methodology to account for value for money of public health interventions: a systematic review. *BMC Public Health*, 15(1), 582.

Basu, A., & Meltzer, D. (2005). Implications of spill over effects within the family for medical cost-effectiveness analysis. *Journal of Health Economics*, 24(4), 751-773.

Cabinet Office Strategy Unit (2008) *Food: an analysis of the issues*. Cabinet Office. Available at: http://webarchive.nationalarchives.gov.uk/http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/food/food_analysis.pdf [Accessed 21/1/16]

Cabinet Office (2009a) *A guide to Social Return on Investment*, Cabinet Office and SROI Network: London.

Cabinet Office (2009b) *Social Return on Investment and commissioning: How commissioners can use SROI to achieve better results*, Cabinet Office: London.

Centre for Food, Physical Activity and Obesity Research. (2008) *A systematic review of the effect of nutrition, diet and dietary change on learning, education and performance of children of relevance to UK schools*. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/18377677> [Accessed 21/1/16]

Chapagain, A. & James, K. (2011) *The water and carbon footprint of household food and drink waste in the UK*. WRAP. Available at: http://www.wrap.org.uk/sites/files/wrap/Water%20and%20Carbon%20Footprint%20report%20Final%2C%20Nov%202011_0.pdf [Accessed 21/1/16]

Cobiac, L. J., Vos, T., & Veerman, J. L. (2010). Cost-effectiveness of interventions to promote fruit and vegetable consumption. *PLoS One*, 5(11), e14148.

Cordingley, F., Reeve, S., & Stephenson, J. (2011) *Food Waste in Schools: final report*. WRAP. Available at: http://www2.wrap.org.uk/downloads/Food_waste_in_schools_full_report_7199284e.10460.pdf [Accessed 21/1/16]

Courteney, P. (2012) *The Local Food programme: A Social Return on Investment Approach*. CCRI.

DfE (2015) *Standards for School Food in England*. Available at: <https://www.gov.uk/government/publications/standards-for-school-food-in-england> [Accessed 21/1/16]

Downing, E., Priestly, E. & Carr, W. (2015) *Food Waste*. House of Commons Briefing Paper Number CBP07045. Available at: <http://researchbriefings.files.parliament.uk/documents/SN07045/SN07045.pdf> [Accessed 21/1/16]

Durie, S., (2008) *Hungry for Success – Local Food for School Meals: a predictive SROI Report*, Social Economy Scotland and Communities Scotland.

Department of Health (2000) *NHS Cancer Plan*. London: Department of Health.

Emerson, J. (2000) *Social return on investment: exploring aspects of value creation in the non-profit sector in Social Purpose Enterprises and Venture Philanthropy in the New Millennium, vol. 2.*, The Roberts Foundation, San Francisco. pp. 131–173.

Food Kirklees (2015) *Kirklees Food Charter*. Available at: <http://foodkirklees.org.uk/> [Accessed 21/1/16]

Greenpeace Scotland (2009) *Social Return on Investment (SROI) Analysis of the Greenlink*, a partnership project managed by the Central Scotland Forest Trust. Available at: <http://www.greenspacescotland.org.uk/SharedFiles/Download.aspx?pageid=133&mid=129&fileid=133> [Accessed 21/1/16]

Gray, S., Jones, M., Means, R., Orme, J., Oxford, L., Pitt, P., & Salmon, D. (2015) *Evaluating the Food for Life Partnership in New Settings: Final Report*. UWE Bristol.

Healthwatch Kirklees (2015) *Patient Experience of Hospital Food at Calderdale & Huddersfield NHS Foundation Trust*. Healthwatch Kirklees.

Hospital Food Standards Panel (2014) *Summary Cost Benefit Analysis*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399349/hospital-food-cb-analysis.pdf [Accessed 21/1/16]

HM Treasury (2003) *Green Book*. HM Stationary Office. Available at: www.hm-treasury.gov.uk/economic_data_and_tools/greenbook/data_greenbook_index.cfm [Accessed 21/1/16]

HM Treasury (2006) *Value for Money Guidance*, HM Stationary Office. Available at: www.hm-treasury.gov.uk/media/4/4/vfm_assessmentguidance061006opt.pdf [Accessed 21/1/16]

John, J., Wolfenstetter, S. B., & Wenig, C. M. (2012). An economic perspective on childhood obesity: recent findings on cost of illness and cost effectiveness of interventions. *Nutrition*, 28(9), 829-839.

Jones, M., Dailami, N., Weitkamp, E., Kimberlee, R., Salmon, D. & Orme, J. (2012) Food Sustainability Education as a Route to Healthier Eating: Evaluation of a multi-component school programme in English primary schools. *Health Education Research*, 27 (3). 448-458.

Jones, M., Pitt, H., Oxford, L., Bray, I. & Orme, J. (2015) *Pupil survey in local commission areas: Food for Life's impact on primary school children's consumption of fruit and vegetables*. UWE Bristol.

Kersley, H. & Knuutila, A. (2011) *The benefits of procuring school meals through the Food For Life Partnership: An economic analysis*, New Economics Foundation. Available at: <http://www.neweconomics.org/publications/entry/the-benefits-of-procuring-school-meals-through-the-food-for-life-partnership> [Accessed 21/1/16]

Kimberlee, R., Jones, M., Orme, J. & Salmon, D. (2013) Whole School Food Programmes and the Kitchen Environment. *British Food Journal*, 115 (5). 756-768.

Kirklees Council (2013a) *Kirklees Children and Young People Plan 2013-16*. Available at: <http://www.kirklees.gov.uk/you-kmc/partners/kirkleesPartnership/pdf/childrenYoungPeoplePlan2013.pdf> [Accessed 21/1/16]

Kirklees Council (2013b) *Cabinet Office Report on School Catering Provision*. <https://democracy.kirklees.gov.uk/Data/Cabinet/201304091600/Agenda/CABINET09041348041D.pdf> [Accessed 21/1/16]

Kirklees Council (n.d.) *The FINE Project*. Available at: <https://www.kirklees.gov.uk/you-kmc/partners/publicHealth/pdf/FINELeaflet.pdf> [Accessed 21/1/16]

Kirklees Health and Well-being Board (2013) *Kirklees Joint Strategic Needs Assessment*. Available at: <https://www.kirklees.gov.uk/you-kmc/partners/health/jsna/pdf/KirkleesJSNAKirkleessummary.pdf> [Accessed 21/1/16]

Kirklees Partnership (2013) *Kirklees Joint Health and Wellbeing Strategy 2013-2020*.

Lancaster, O. & Dune, S. (2008) *The Social Return on Investment of Food for Life School Meals in East Ayrshire*. Footprint Consulting Limited.

Longrigg, A. (2005). *London Hospital Food Project Economic Evaluation*. London: nef.

Lehnert, T., Sonntag, D., Konnopka, A., Riedel-Heller, S., & König, H. H. (2012). The long-term cost-effectiveness of obesity prevention interventions: systematic literature review. *Obesity reviews*, 13(6), 537-553.

Lehnert, T., Sonntag, D., Konnopka, A., Riedel-Heller, S., & König, H. H. (2013). Economic costs of overweight and obesity. *Best Practice & Research Clinical Endocrinology & Metabolism*, 27(2), 105-115.

Lim *et al.* (2012) A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet*. 380:2224-60

Murray *et al.* (2013) UK health performance: findings of the Global Burden of Disease Study 2010, *The Lancet*.

Pitt, H., Orme, J., Gray, S., Jones, M., Means, R. and Salmon, D. (2014) *Evaluating the Food for Life Partnership in New Settings: First Interim Report*. UWE Bristol.

Pitt H., & Jones, M. (2014) Food for Life Local Commissions Review: Initial Report. UWE Bristol.

Public Health England's information on Childhood Obesity. Available at: http://www.noo.org.uk/NOO_about_obesity/obesity_and_health/health_risk_child [Accessed 21/1/16]

Pretty, J.N., Ball, A.S., Lang, T., Morison, J.I.L. (2005) Farm Costs and food miles: An assessment of the full cost of the UK weekly food basket, *Food Policy* 30.

National Obesity Observatory (nd) Economics of Obesity. Available at: http://www.noo.org.uk/NOO_about_obesity/economics [Accessed 21/1/16]

Nelson, M. (2013). School food cost–benefits: England. *Public Health Nutrition*, 16(06), 1006-1011.

NHS Kirklees and Council (2010) *Kirklees Joint Strategic Needs Assessment 2010*.

NHS Kirklees and Council (2012) *Current Living in Kirklees Survey (CLIK)*.

NICE (2013) How NICE measures value for money in relation to public health interventions. NICE. Available at: <http://publications.nice.org.uk/how-nice-measures-value-for-money-in-relation-to-public-health-interventions-lgb10b/nices-approach-to-economic-analysis-for-public-health-interventions> [Accessed 21/1/16]

Park, MH., Falconer, C., Viner, RM., *et al.* (2012) The impact of childhood obesity on morbidity and mortality in adulthood: a systematic review. *Obesity Review*, 13:985–1000.

Pil, L., Putman, K., Cardon, G., De Bourdeaudhuij, I., Manios, Y., Androutsos, O., ... & Annemans, L. (2014). Establishing a method to estimate the cost-effectiveness of a kindergarten-based, family-involved intervention to prevent obesity in early childhood. The ToyBox-study. *Obesity Reviews*, 15(S3), 81-89.

Scarborough, P., Bhatnagar, P., Wickramasinghe, K. K., Allender, S., Foster, C., & Rayner, M. (2011). The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006–07 NHS costs. *Journal of Public Health*, 33(4), 527-535.

Soil Association, Food for Life Catering Mark (2015) *Handbook 2015 for Schools*. Available at: <http://www.sacert.org/catering/standards> [Accessed 21/1/16]

Solmi, F., & Morris, S. (2015). Association between childhood obesity and use of regular medications in the UK: longitudinal cohort study of children aged 5–11 years. *BMJ Open*, 5(6), e007373.

Sonntag, D., Ali, S., & De Bock, F. (2016). Lifetime indirect cost of childhood overweight and obesity: A decision analytic model. *Obesity*, 24(1), 200-206.

Stein, M. (2012) *Public Sector Food Procurement and Sustainability in UK Schools*. Salford University Conference Paper. Available at: http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2012/IFSA2012_WS4.2_Stein.pdf [Accessed 21/1/16]

Tran, B. X., Ohinmaa, A., Kuhle, S., Johnson, J. A., & Veugelers, P. J. (2014). Life course impact of school-based promotion of healthy eating and active living to prevent childhood obesity. *PLoS One*, 9(7), e102242.

Thatcher, J. & Sharp, L. (2008) Measuring the local economic impact of National Health Service procurement in the UK: an evaluation of the Cornwall Food Programme and LM3, *The International Journal of Justice and Sustainability*, 13:3, 253-270,

Salmon, D., Jones, M., Weitkamp, E., Kimberlee, R., & Orme, J. (2013) Take Home Messages on Sustainable Food: Surveying Parent Perceptions of the Effects of a Primary School Programme. *British Journal of Education, Society & Behavioural Science* 3(4) 490-503.

School Food Trust (2009) *School lunch and learning behaviour in primary schools: an intervention study*

School Food Trust (2009) *School lunch and learning behaviour: secondary schools*

YHPHO (Yorkshire and Humberside Public Health Observatory) (2012) *APHO Diabetes Prevalence Model*. Available at: <http://www.yhpho.org.uk/default.aspx?RID=81090> [Accessed 21/1/16]

Van Mastrigt, G. A., Paulus, A. T., Aarts, M. J., Evers, S. M., & Alayli-Goebbels, A. F. (2015). A qualitative study on the views of experts regarding the incorporation of non-health outcomes into the economic evaluations of public health interventions. *BMC Public Health*, 15(1), 954.

Vale, L., Adamson, A., Critchley, J., Rushton, S., Armstrong, N., Donaldson, C. (2011) *Economic evaluation: evaluating the short-term impacts of the school food policy and experimental modelling of the longer term impacts*. Public Health Research Consortium.

Weitkamp, E., Jones, M., Salmon, D., N., Kimberlee, R., Salmon, D., & Orme, J. (2013) Creating a Learning Environment to Promote Food Sustainability Issues in Primary Schools. Staff Perceptions of Implementing the Food for Life Partnership Programme. *Sustainability*, 5(3), 1128-1140.

World Health Organisation (WHO) (2003) *Diet, Nutrition and the Prevention of Chronic Disease*. A Report of a Joint FAO/WHO Consultation. Geneva.

Appendix 1. Stakeholder List

Stakeholder	Reason For Inclusion	Number
School staff: FFL lead teachers, cooks, head teachers, other school staff	Potential benefits to the school, employment conditions and the working environment. Good insight into the perspectives of children and their families.	16 (8 Kirklees, 8 Calderdale)
Staff linked to FFL Hospital Pilot (FFL/CQUIN Steering Group, CRH's catering contractor (ISS), Healthwatch)	Potential benefits to the workplace, employment conditions and the working environment. Good insight into the perspectives of patients and their families.	5
Local authority (Public Health) and CCG staff	A population level service working towards local strategic objectives	4 (2 Kirklees, 2 Calderdale)
Local authority catering staff	Directly affected by reforms to catering standards and procurement practices	3
Food producers, suppliers and retailers (meat, dairy, cheese, fresh vegetables, dry goods)	Potential benefits to their business and working conditions. Well placed to give insight into the impacts of the programme on the local economy and natural environment.	6
Community and voluntary sector staff	Interest in partnership working and potential impact on local services	2
FFL staff	Good overall understanding of the potential impacts of the programme for a wide range of groups.	7
Total		43

Stakeholder	Reason For Exclusion
School children Parents and families of school children Other direct beneficiaries: nursery children, patients and care home residents	It was beyond the resources of the study to directly consult with this group. However feedback was available from other sources. Indirect evidence was also available from other stakeholders.
Big Lottery Department for Education	Funders of programme activities but only indirectly impacted on through, for example, achievement of organisational or policy goals.

Appendix 2. Stakeholder interview questions (1)

Example: FFL – SCHOOL STAFF INTERVIEW QUESTIONS

Thank you for agreeing to take part in this evaluation. The aim of this interview is for us to find out more about your experience of and the support you received from the FFL programme and how things have changed for you since. The findings will form part of an evaluation report on the FFL programme. Your views and those of all consulted as part of the evaluation will be used to inform the final evaluation report.

INTRODUCTIONS

Can you tell me a bit about yourself and your involvement with the FFL programme?

1. Name and background info?
2. How did you hear about the programme?
3. What did you expect?
4. Were you already engaged with a similar project?

BEFORE FFL

5. Can you tell me a bit about how things were for you before engaging with FFL?
6. How would you describe food-related activities in your workplace? What were your expectations?

INITIAL PERCEPTIONS OF FFL

7. Practicalities – engagement with FFL staff and resources- meetings, training events etc.
8. What did you like / not like?
9. Did you access any other projects as a result of working with FFL?
10. Did you give anything up to work with FFL?
11. If there was anything you could have changed what would it be?
12. Did the project match your expectations? How is it different to these?

WHAT CHANGED FOR YOU?

13. Do you feel like anything has changed for you as a result of working with FFL?
 - Changes for children families / community in school and out of school
 - Changes for staff in school and other related aspects of school. School as a whole.
 - Changes to curriculum / lunch period /school meals (etc. as appropriate)
14. [Each case] How important was this change? Were all the changes positive?
15. Were all the changes expected or was there anything that you didn't expect that changed?
16. Which of these changes will make the biggest difference to you?
17. How long do you think the change will last?

COULD ANYTHING ELSE ACCOUNT FOR THESE CHANGES?

18. What other projects/services/agencies were you engaged with at the same time?
19. Did anyone else contribute to the experience/change?

WHAT IS THIS PROGRAMME WORTH?

20. Can you compare it to something else just as important to you and your school?
21. Which other ways might you achieve the same changes?

Appendix 3. Stakeholder interview questions (2)

Example: FFL – FOOD SUPPLIER INTERVIEW QUESTIONS

(Adapted from Lancaster et al 2008)

Thank you for agreeing to take part in this evaluation. The aim of this interview is for us to find out more about your experience of and contact with the FFL programme and what you think about the impact it's having. The findings will form part of an evaluation report on the FFL programme. Your views and those of all consulted as part of the evaluation will be used to inform the final evaluation report.

1. Your name, Business name and contact. Your role within the business
2. Can you tell me a bit about yourself and your involvement with the FFL programme?
3. How many schools in Local Authority area are you supplying?
4. Please list the key items you supply to school meals
5. How important is school food catering – and related local authority catering – to your business?
6. I am assuming that you supply a range of local authority caterers and other caterers involved in school food? Approximately how many?
7. Would you be prepared tell us confidentially what the total value of these contracts are- and what fraction they represent of your total turnover?
8. What have been the benefits to you from undertaking the contracts?

What might have happened to your business without the contracts?
9. How often do you make a delivery for these contracts?
10. Do you supply your customers in the local authority or deliver to a central depot?
11. What and how many vehicles do you use (e.g. HGV's, vans). Are your deliveries refrigerated?
12. Roughly what's your delivery mileage in a month or week to supply the contracts? Do you supply any items from other producers as a regular part of the contract (please estimate the overall percentage of your contract supplied from other producers)
13. Please tell us about any additional costs you have had as a result of the contract:
 - a. Extra staffing (numbers and/or extra hours)
 - b. Equipment (the cost of lease/purchase):
 - c. New premises (cost)

- d. New transport (cost)
- e. Refrigeration (cost)
- f. Any other costs

14. Are you planning to re-tender for the contract (contracts)? Please say why.

Appendix 4. Calculating Inputs

The Food for Life programme in Kirklees April 2013-March 2015

A number of inputs were identified in the scoping and stakeholder analysis stage of the SROI study. These are set out in detail and summarised below.

Kirklees Public Health funding

The original funding through the Public Health division in Kirklees for the FFL programme was £150,000 for the period from 1st April 2013 to 31st March 2016 inclusive. Of this total £30,000 was paid for initial start-up costs from the 1st February 2013.

For the period 1st April 2014 to 31st March 2016, an additional £65,000 budget was allocated to fund an increase in activity and the support required for care settings and hospitals to engage with the FFL approach.

Therefore, the total budget for the period 1st April 2013 to 31st March 2016 was £215,000

The scope of this SROI analysis was confined to the period 1st April 2013 to 31st March 2015. The funding over this period was £120,000 (for school focused work) plus £32,500 (for hospital, care home and early years work).

This gives a total of £152,000 through this source.

Big Lottery Funding

In addition to funding through local authority, the local commission benefited from resources made available to FFL from a grant to the Soil Association and partner agencies as part of the BLF Phase 2 Wellbeing Programme. The original BLF funding period corresponds to the period selected for analysis in this SROI report (1/4/13 to 31/3/15), although FFL was permitted some flexibility to account for delays in the actual start of the grant period and for extension of work into 2015.

FFL local commissions will have benefited from BLF funded central FFL resources including those for management, staff support and development, monitoring, evaluation and programme development. This will have included national work on enhancing the design of locally commissioned programmes, new settings development, networking and policy advocacy. FFL's Finance Officer estimated that three members of staff undertook 29 days work supported this commission at an average cost of £495 per day, which gives a total of £26,235.

Using this estimate, **this gives a total of £26,235 from this source.**

School Food Plan costs

The School Food Plan is a Department for Education funded programme that started in September 2014. Under this scheme FFL were funded to delivery training and support for schools to implement the universal infant free school meals initiative and to promote school meal take up

more widely in schools. Between September 2014 and March 2015, FFL were awarded £30,245 to deliver the work to all schools in the North of England. Funding was not specifically allocated to schools in local authority areas, although schools in Kirklees could access the scheme on a voluntary basis. Following interviews and correspondence with FFL staff, we decided to allocate a per-local authority fraction of the funding as a cost. This was calculated by dividing the total funds by the number of local authorities in the North of England: £30,245/43 =£703.

This gives a total of £703 from this source.

School Staff FFL Mark costs

Many FFL linked activities are integrated into the routine delivery of school activities. These include the provision of school meals and teaching of food-related education in class time. Such activities have not been included as programme costs because they would have occurred without the programme.

However the FFL programme is linked to some areas of additional time, and therefore costs, for school and catering staff. These include time for completion of FFL Award applications, including preparation, self-evaluation and consultations.

In Kirklees, over the evaluation period 43 schools completed FFL award applications. Drawing upon interviews with schools we estimate that the additional time for these activities is 10 hours per application, which is £371 based upon £37.10 per hour Qualified Teacher Main Pay Scale Spine Point 3 hourly rate Source: DfE (2014) Teachers Pay and Conditions.

This gives a total of £15,953 from this source.

Catering Silver Mark Accreditation Costs

In the SROI period of analysis, Kirklees Catering Service had to renew its silver FFL Catering Mark award. This carried a fee of £1000 for inspection and renewal. We estimate that the additional time involved in completing the award application was 30 hours over and above routine quality assurance activities, which is £912 based upon £30.40 per hour for an employee on GR14. Source Kirklees Council Employee Handbook (2014)

<http://www.kirklees.gov.uk/employment/pdf/employeehandbook.pdf>

Based upon the £1000 fee and £912 staff costs, **this gives a total of £1,912 from this source.**

School meal costs

The FFL Catering Mark and FFL award schemes at bronze, silver and gold levels involve meeting a number of criteria that may have an impact on the costs of school meals. In Kirklees no schools or caterers have achieved the gold standard. We therefore examined whether there were additional costs associated with meeting the bronze and silver criteria. Kirklees Catering Service reported that there were no additional costs linked to achieving silver FFL Catering Mark. Higher costs linked to, for example the procurement of organic dry goods was off-set by reduced spending on other ingredients. These changes in procurement and catering practices were incorporated into ongoing change management framework for the organisation. The service had therefore not increased school meal costs to customers and did not have an overall higher spend for ingredients and catering practices.

No costs were identified through this element of the programme.

Supplier costs

Suppliers interviewed included meat, dairy, dry goods and fruit and vegetable suppliers. The suppliers did not identify additional costs associated with meeting contracts linked to FFL.

No costs were identified through this element of the programme.

Costs for pupils, volunteers, parents and the wider community

The time given by pupils, volunteers, parents and the wider community as part of their involvement in the programme has not been allocated a cost. This follows the convention in most SROI analyses where the time and efforts of programme beneficiaries is not considered material in circumstances where they are not forfeiting forms of paid employment.

No costs were identified through this element of the programme.

New Settings: Hospitals, Early Years and Care Homes

FFL activities in new settings consisted largely of attending developmental meetings and training events. During the SROI analysis period, we did not identify specific costs. This is likely to be different in the delivery period afterwards between April 2015 and March 2016.

No costs were identified through this element of the programme.

Summary of inputs included in the SROI analysis

Input	Costs identified
Kirklees Local Authority Public Health	£152,000
Big Lottery Fund	£26,235
School Food Plan	£703
School Staff FFL Mark applications	£15,953
Catering Silver Mark application	£1,912
School meals	-
Suppliers	-
Pupil, volunteer, parent and wider community member time	-
	196,803

The Food for Life programme in Calderdale April 2013-March 2015

A number of inputs were identified in the scoping and stakeholder analysis stage of the SROI study. These are set out in detail and summarised at the end of this section.

Calderdale Council (Public Health) and Calderdale CCG funding

The funding through Calderdale Council (Public Health) and Calderdale CCG for the FFL programme was £165k between 1st April 2013 to 31st March 2015 (£30k from 1/4/13-31/9/13; £135k from 1/10/13-31/3/15).

This gives a total of £165,000 through this source.

Big Lottery Funding

In addition to funding through local authority, the local commission benefited from resources made available to FFL from a grant to the Soil Association and partner agencies as part of the BLF Phase 2 Wellbeing Programme. The original BLF funding period corresponds to the period selected for analysis in this SROI report (1/4/13 to 31/3/15), although FFL was permitted some flexibility to account for delays in the actual start of the grant period and for extension of work into 2015.

FFL local commissions will have benefited from BLF funded central FFL resources including those for management, staff support and development, monitoring, evaluation and programme development. This will have included national work on enhancing the design of locally commissioned programmes, new settings development, networking and policy advocacy. FFL's Finance Officer estimated that three members of staff undertook 29 days work supported this commission at a cost of £495 per day, which gives a total of £26,235.

Using this estimate, **this gives a total of £26,235 from this source.**

School Food Plan costs

The School Food Plan is a Department for Education funded programme that started in September 2014. Under this scheme FFL were funded to delivery training and support for schools to implement the universal infant free school meals initiative and to promote school meal take up more widely in schools. Between September 2014 and March 2015, FFL were awarded £30,245 to deliver the work to all schools in the North of England. Funding was not specifically allocated to schools in local authority areas, although schools in Kirklees could access the scheme on a voluntary basis. Following interviews and correspondence with FFL staff, we decided to allocate a per-local authority fraction of the funding as a cost. This was calculated by dividing the total funds by the number of local authorities in the North of England: £30,245/43 =£703.

This gives a total of £703 from this source.

School Staff FFL Mark costs

Many FFL linked activities are integrated into the routine delivery of school activities. These include the provision of school meals and teaching of food-related education in class time. Such activities have not been included as programme costs because they would have occurred without the programme.

However the FFL programme is linked to some areas of additional time, and therefore costs, for school and catering staff. These include time for completion of FFL Award applications, including preparation, self-evaluation and consultations.

In Calderdale, over the evaluation period 25 schools completed FFL award applications. Drawing upon interviews with schools we estimate that the additional time for these activities is 10 hours per application, which is £371 based upon £37.10 per hour Qualified Teacher Main Pay Scale Spine Point 3 hourly rate Source: DfE (2014) Teachers Pay and Conditions.

This gives a total of £6,956 from this source.

Catering Silver Mark Accreditation Costs

In the SROI period of analysis, CHFT started to apply for the FFL Catering Mark award. This carried a fee of £1000 for inspection and renewal. We estimate that the additional time involved in

completing the award application was 30 hours over and above routine quality assurance activities, which is £912 based upon £30.40 per hour for an employee.

Based upon the £1000 fee and £912 staff costs, **this gives a total of £1,912 from this source.**

School meal costs

The FFL Catering Mark and FFL award schemes at bronze, silver and gold levels involve meeting a number of criteria that may have an impact on the costs of school meals. In Calderdale one school caterer had achieved the gold standard.

We examined whether there were additional costs associated with meeting the bronze and silver criteria. Cooks and caterers reported that there were no additional costs linked to achieving silver FFL Catering Mark. Higher costs linked to, for example the procurement of organic dry goods was off-set by reduced spending on other ingredients. These changes in procurement and catering practices were incorporated into the practice of organisations. The services had therefore not increased school meal costs to customers and did not have an overall higher spend for ingredients and catering practices.

No costs were identified through this element of the programme.

Supplier costs

Suppliers interviewed included meat, dairy, dry goods and fruit and vegetable suppliers. The suppliers did not identify additional costs associated with meeting contracts linked to FFL.

No costs were identified through this element of the programme.

Costs for pupils, volunteers, parents and the wider community

The time given by pupils, volunteers, parents and the wider community as part of their involvement in the programme has not been allocated a cost. This follows the convention in most SROI analyses where the time and efforts of programme beneficiaries is not considered material in circumstances where they are not forfeiting forms of paid employment.

No costs were identified through this element of the programme.

New Settings: Hospitals, Early Years and Care Homes

FFL activities in new settings consisted largely of attending developmental meetings and training events. During the SROI analysis period, we did not identify specific costs. This is likely to be different in the delivery period afterwards between April 2015 and March 2016.

No costs were identified through this element of the programme.

Summary of inputs included in the SROI analysis

Input	Costs identified
Calderdale Local Authority Public Health and CCG	£165,000
Big Lottery Fund	£26,235

School Food Plan	£703
School Staff FFL Mark applications	£6,956
School meals	-
Suppliers	-
Pupil, volunteer, parent and wider community member time	-
	£198,894

Appendix 5. Impact Map and Data Sources

The embedded excel workbook has impact maps for Calderdale and Kirklees along with data and data source information.



Kirklees Calderdale
Impact Map_10.xlsx

Appendix 6. Assessment & valuation of health outcomes

This Appendix provides further details on process for assessing the dietary health-related outcomes of the FFL programme.

The wider research literature is summarised in the section “**Context: economic studies of FFL and similar programmes**” in the Introduction of this report. This outlined the potential value to healthcare services and more generally to public health of interventions designed to improve the diets of children and young people. However at present there is no widely accepted approach to assessing the financial benefits of such interventions with respect to health outcomes. To address this problem we drew upon both local and external sources of evidence to develop a ‘willingness to pay’ approach with key stakeholders in Public Health.

Stakeholder perspectives, external evidence and guidance

Stakeholders, both from within the local authority Public Health teams and outside, were aware of the importance of dietary health and its value to NHS and public health. Building on this we summarised the key external evidence and guidance as follows:

1. Low fruit and vegetable consumption is a major risk factor in the burden of disease (WHO, 2003: Lancet Global Burden of Disease Panel [Lim et al], 2012).
2. 42,200 deaths could be avoided each year if the UK population met 5 a day guidelines for fruit and vegetable intake. This is equivalent to 411,000 QALYs (Cabinet Office Strategy Unit, 2008).
3. NICE states “Generally, we consider that interventions costing the NHS less than £20,000 per QALY gained are cost effective. Those costing between £20,000 and £30,000 per QALY gained may also be deemed cost effective, if certain conditions are satisfied” (NICE, 2013).

4. The health cost benefits of children meeting guidelines for fruit and vegetable intake accrue mainly over a longer term in the life-course. However there will also be short term (5 years or less) cost savings linked to reduced healthcare use (Cobiac et al, 2012; Lehnert et al, 2012; Solmi & Morris, 2015).

Interpreting the local evaluation evidence on FFL and children's diets

Secondly we presented stakeholders with the evaluation evidence available on the association between FFL and fruit and vegetable consumption (for full report see Jones et al, 2015) and an estimate of the impact on Key 2 pupils in the local authority areas:

1. After adjusting for potential confounders, pupils in schools engaged with the FFL programme are twice as likely to eat five or more portions of fruit and vegetables per day OR=2.07, p=0.000, CI (1.54, 2.77), they were also about 60% more likely to eat more than the national average of 2.55 portions per day; OR=1.66, p=0.000, CI (1.37, 2.00).
2. The survey found that 12.3% Year 4-5 students met 5 a day in FFLP schools
5.7% Year 4-5 students met 5 a day in Comparison schools.
3. Using school population data we estimate that:
 - a. in Kirklees 960 more Key Stage 2 pupils in FFL schools met the 5 a day FV guideline,
 - b. in Calderdale 890 more Key Stage 2 pupils in FFL schools met the 5 a day FV guideline,compared to the number of Key Stage pupils meeting 5 a day FV guideline in the Comparison schools.

The evaluation was limited to Key Stage 2 children. We therefore did not have evidence on the diets of children in Key Stages 1, 3 and 4.

Valuing the outcomes

We confirmed that there was a value to Public Health and the NHS of Key Stage 2 children making dietary improvements. We proposed that this can be expressed as “the monetary value of a change in the behaviour of a Key Stage 2 child such that s/he meets the 5 a day fruit and vegetable guidance.”

Drawing upon the Cabinet Office estimate of the QALYs gained if the UK population met 5 a day guidelines for fruit and vegetable intake, we used a per capita value of a QALY gained as a starting point:

“QALYs obtained through meeting FV guidelines X Lower QALY value / UK population in 2005”

$$411,000 \times \text{£}20,000 / 60,400,000 = \text{£}136.00$$

Therefore the monetary value of a change in the behaviour of a Key Stage 2 child such that s/he meets the 5 a day fruit and vegetable guidance was £136.

Establishing impact

The next step involved exploring what would have happened anyway or were the result of other factors. This followed the same process in the main report for all outcomes

1. Deadweight: 20% of the change would have happened anyway. This was possibly because schools participating in the FFL programme would have made changes to food in school.
2. Displacement: 20% of the change represented a displacement of other outcomes. This was the standard estimate used for all outcomes.
3. Attribution: 20% of the change was caused by other agencies. The most important agencies in this respect were caterers that had started to put reforms in place before the FFL commission period.

With £136 as the starting point, the value created by FFL of each Key Stage 2 child meeting 5 a day FV guidance is therefore £69.63.

Sensitivity analysis

The use of QALY related data to provide a basis for the financial proxy involves a number of assumptions which would be difficult to accommodate in mainstream health economics. However in this case it provided a basis for putting a financial figure to our indicator. This helped us adhere to SROI principles by enabling dialogue with key stakeholders on what commissioners might be willing to pay for the dietary health-related outcomes of the programme.

In order to avoid over claiming the sensitivity analysis section of the main report reports on an SROI ratio that excludes the valuation of the dietary-related health outcome. This reduces the overall SROI ratio by small amount, but does not affect the overall positive return on investment.

Appendix 7: FFL Locally Commissioned Programme Logic Model

This logic model was developed in consultation with the FFL programme team in September 2014.

