FareShare
fighting hunger, tackling food waste

The Wasted Opportunity

The economic and social value of redistributed surplus food; the current and potential cost avoided by the UK public sector resulting from FareShare's work.

This report uses research commissioned by FareShare and conducted by NEF Consulting, the consultancy arm of the New Economics Foundation.

About this report

FareShare is the UK's largest charity fighting hunger and food waste. We redistribute good quality surplus food from the food industry and send it to nearly 10,000 charities and community groups including homeless hostels, children's breakfast clubs, domestic violence refuges and community cafes. In our annual report we announce that FareShare provided food sufficient for nearly 37 million meals last year which were needed by some of the most vulnerable people in our society. We also reported a 59% increase year on year in the number of people who had access to our food and an increase of 44% year on year in the number of charity and community groups we supported.

The organisations receiving FareShare food fall into two categories, which are referred to as Community Food Members (CFMs) and Community Food Associates (CFAs) and alongside the 36.7 million meals they serve up to their beneficiaries, using food from FareShare, they provide life changing support, to over 750,000 people a week.

We know the front line work of these organisations reduces pressure on public services and as a result these organisations are saving national and local governments and UK PLC, considerable sums of money every year.

We wanted to establish a financial value for the socio-economic impact of FareShare's work and commissioned NEF Consulting to model and estimate it.

We understood that there are positive outcomes as a result of FareShare's work on both the charity members in terms of avoided food costs, but also the beneficiaries in terms of the nutritional benefits to them.

FareShare hypothesized that its service to the member charities would result in positive outcomes for the beneficiaries in terms of physical and mental health and well-being, potentially positive educational and training outcomes, housing outcomes and justice outcomes.

It was our belief that these positive outcomes resulting from the FareShare service would provide a cost saving in Public Services costs avoided, for example, lower health costs resulting from malnutrition, or fewer demands on GP time from patients suffering from loneliness or isolation.

By using well established Social Return on Investment (SROI) methodology in analysing FareShare's food and charity dataset, and by speaking to a sample of the charities we support, NEF Consulting were able to determine the economic and social value to the UK resulting from FareShare's work each year.

Key findings

The results of the study are hugely inspiring.

- NEF Consulting estimates that, by collecting food that would otherwise go to waste and redistributing it to its Community Food Members and Associates, FareShare creates approximately £50.9 million of social-economic impact every year. This is made up of an estimated £6.9 million in social value to the beneficiaries themselves and £44.0 million in savings to the State.

The implication of this calculation is that; were FareShare and other charities in the food redistribution sector able to scale up their operational capacity in order to handle the same percentage of redistributed surplus food that France handles, the value back to the state would be estimated at £500 million per year.

What is food loss and waste?

The Food and Agriculture Organisation of the UN (FAO) defines food loss and waste as a decrease in the quantity or quality of edible food that is intended for human consumption.[1]

This definition includes:

- The redirecting of edible food to be used as animal feed
- Converting food to bioenergy
- Dumping into landfills
- The FAO go on to define the differences between food loss and food waste as follows:
- **Food loss** is mainly caused by the malfunctioning of the food production and supply system or its institutional and policy framework. This could be due to managerial and technical limitations, such as a lack of proper storage facilities, cold chain, proper food handling practices, infrastructure, packaging or efficient marketing systems.
- **Food waste** refers to the removal from the food supply chain of food which is still fit for human consumption. This is done either by choice or after the food is spoiled or expired due to poor stock management or neglect. Food waste typically but not exclusively happens at the retail and consumer levels whereas food loss takes place at the earlier stages of the food supply chain – during production, post-harvest and processing stages.

The problem of food loss and waste in the UK

Every year in the UK, 650 million meals' worth of surplus food goes to loss or waste – the equivalent of ten meals for every UK citizen per year.[2] Yet this represents only a small percentage of the surplus food that could be diverted to feed people first is made available for human consumption, and there is significant unmet demand. In France, ten times this amount is redistributed.[3]

The environmental impacts of this food loss and waste are not only limited to the volumes and greenhouse gas emissions arising from the unused food. There is a significant waste of UK resources higher up the supply chain in terms of energy, fertiliser and feed, water and labour required to grow and harvest this food, then the manufacture, transport and store the food prior to consumption. This all has a further impact of unnecessary additional CO2e emissions attributable to the UK and the associated global warming effects of these emissions.

Across the globe the resources used to produce food that is eventually lost or wasted account for approximately 4.4 gigatonnes of greenhouse gas emissions (CO2 equivalent) annually, making food loss and waste the world's third largest emitter, after the entirety of China and the United States' national emissions.[4]

According to the UK government's own figures, the UK food industry produces at least 250,000 tonnes of surplus food[5] that is good to eat. Yet only a fraction (less than 6%) of this is made available to vulnerable people: 94% of it is either converted to animal feed, used in anaerobic digestion to produce energy or thrown away and sent to landfill

A significant percentage of this food waste arises in the food supply chain: produce that is grown but not harvested due to cost; surpluses left by demand fluctuations; and seasonal excess supply of particular goods at certain times. Only 2% actually occurs at retail.*

Whilst in aggregate the cost to the UK of this waste of resources is enormous, for individual large agribusinesses, producers and other companies, the cost of this food being wasted is marginal to their operating costs. But for those charities which could receive the food, the value is huge. The problem is that there are additional costs to manage, re-work, store and safely transport such food such that it remains in a good enough condition for eating. And while there are over 10,000 charities across Britain already using redistributed food, they can cope with only a fraction of the demand and often duplicate costs.

Data gathered by the NatCen Social Research centre shows that if the food surplus currently redistributed in the UK was scaled up to the levels that France is achieving and was able to be used by charities, this would represent an annual food cost avoided of £250-£300 million for those charities, and allow them to invest this in their front line services.[6]

* EFRA Committee "Food Waste in England" 2016/17

The problem of hunger in the UK

As if the resources being wasted by the UK food system wasn't bad enough, it coincides with UK food insecurity affecting 8.4 million people each year (1 in 8 of the population).[7]

Based on these estimates, the UK ranks in the bottom half for food insecurity of European countries.[8]

A large proportion of those affected by this issue in the UK are children. Up to 3 million children are affected by Holiday Hunger in the UK. For families whose children are eligible for free school meals, once school is out, this safety net is removed.[9]

Additional costs for activities and childcare can be a strain on families who are already working extra hard to provide the meals their children would normally get at school. The effects on the children go beyond the holidays, with children returning to school in September malnourished, tired and unable to learn.

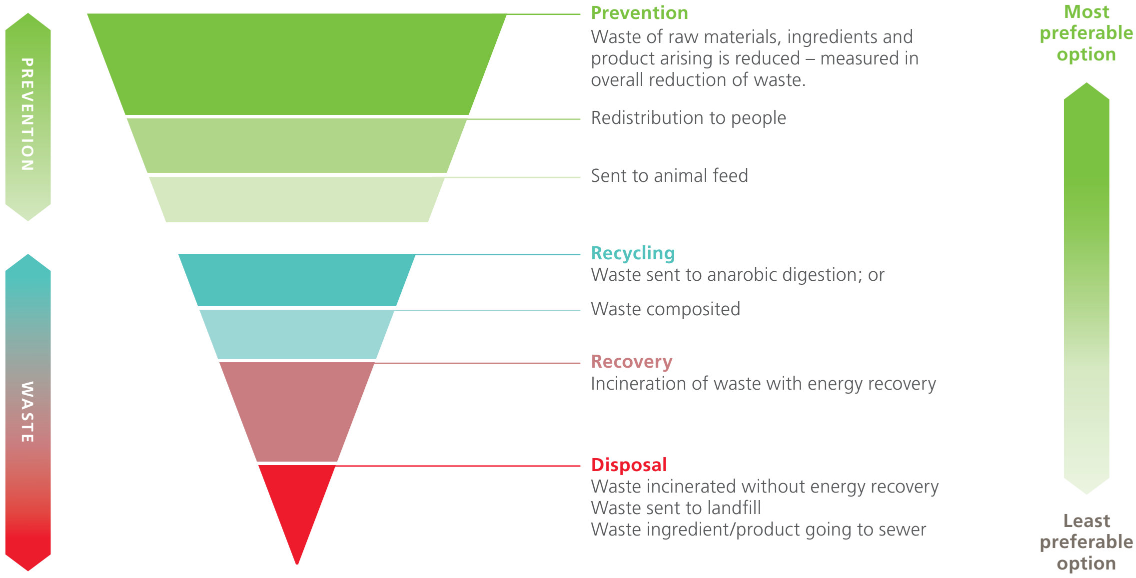
The regulatory framework

The Waste (England and Wales) Regulations 2011 came into force on 11th March 2011. These regulations include the requirement for the Government to ensure that financial incentives work with and not against the waste hierarchy.

The waste hierarchy is defined by the UK as follows:

The UK is also a signatory to the UN Sustainable Development Goals, and in doing so is a signatory to UNSDG 12.3 - Food Waste Reduction. The third target under this goal calls for *"cutting in half per capita global food waste at the retail and consumer level, and reducing food losses along production and supply chains (including post-harvest losses) by 2030"*.

Food and drink material hierarchy

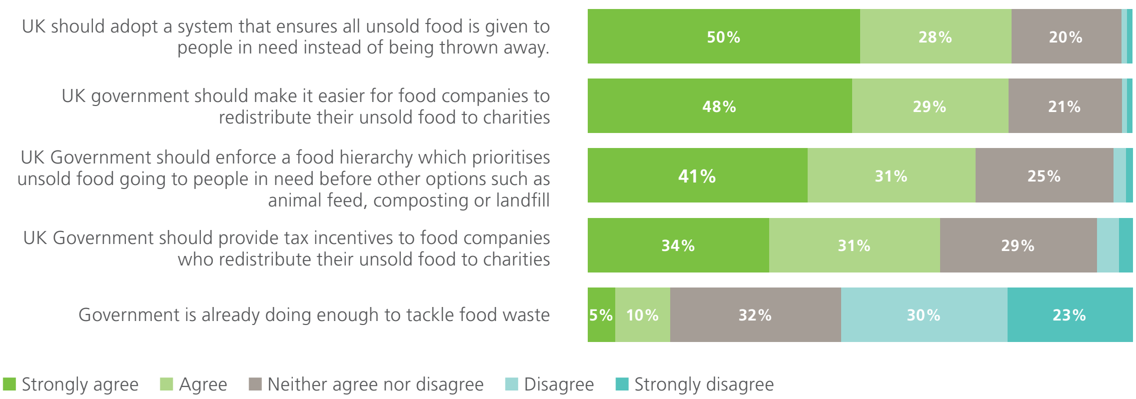


Public opinion

There is very strong public support for reducing food waste, and redistributing surplus food to feed people first.

The public believes more should be done to tackle food waste, as the graph below shows. 50% strongly agree with proposals to ensure all unsold food is given to people in need, and just 2% disagree. Similar strong support is seen across a wide variety of measures. Other polling shows more people worry about food waste than the illegal wildlife trade, or the loss of the planet's natural resources. Only 15% of the public believe the Government is doing enough on food waste at present.

'To what extent do you agree with the following statements:'



Source: Charity Awareness Monitor, Jan 18, nfpSynergy | Base: 1,000 adults 16+, Britain

Economic and social impact calculations

The total annual social and economic value for FareShare's Community Food Members (CFM) in **our modelled sample** was estimated at £28,272,419 for a total of 174,024 beneficiaries across the CFMs included in the model. This represents an average of £162 social and economic value created by FareShare per beneficiary.

The total number of FareShare beneficiaries through the CFM service at the time of the model being created stood at 313,388, according to FareShare's internal data. Multiplying this total number of beneficiaries by the average economic and social value per beneficiary, NEF Consulting estimate the **total annual social and economic value created by FareShare is £50,913,878**, as illustrated in table below.

Number of beneficiaries considered in social and economic value model	174,024
Economic and social value of modelled sample	£28,272,419
Average social and economic value per beneficiary	£162
Number of beneficiaries for all FareShare's CFMs	313,388
Estimated total social and economic value created by FareShare to the UK	£50,913,878
Total social and economic value to the beneficiaries	£6,883,556
Total cost savings to the State	£44,030,322

Community Food Associates (CFAs) are charities that are served by a lighter touch FareShare redistribution model called FareShare Go.

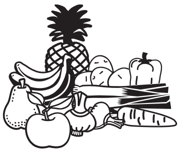
FareShare Go connects local charities to local supermarkets with daily surplus food that would otherwise go to waste.

When we add Community Food Associates to the model with a proxy for average social and economic benefit per beneficiary, NEF Consulting estimated that FareShare creates an additional £10m plus of socio-economic impact per annum. Even though this is a conservative estimate, NEF Consulting chose not to include this additional value in the headline findings, as it requires more in-depth analysis..

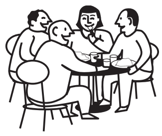
Number of beneficiaries considered in social value model	174,024
Number of beneficiaries of all FareShare's CFMs	313,388
Social value calculated from CFM sample	£28,272,419
Average social value per beneficiary	£162
Extrapolation of overall value created for all CFM beneficiaries	£50,913,878
Average social value per CFM	£17,120
Average social value per CFA	£1,690
Number of CFAs (excluding those that are also CFMs)	6,200
Total annual social value created for CFAs	£10,479,834
Estimated annual social value created for CFMs and CFAs	£61,393,713

FareShare performance 2017-2018

The chart below provides FareShare's headline figures for financial year 17/18:

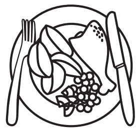


16,992 tonnes
of food received
(up 25% from 13,552 tonnes)



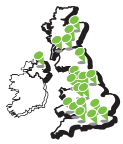
772,390 people
supported
every week
(up 59% from 484,376)

9,653 charities
and community
groups helped
(up 44% from 6,723)



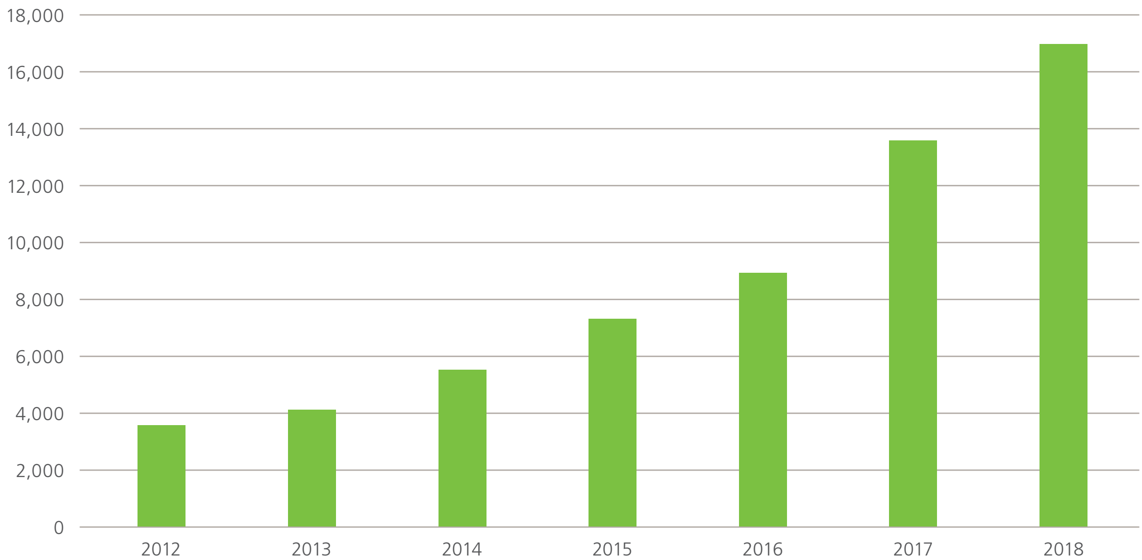
36.7 million meals
provided to
vulnerable people
(up 28% from 28.6 million)

£28.7 million
estimated value of
food to charities
(+28% from £22.4 million)



1,500
towns and cities
reached across the UK
(up from 1,300)

Food received in tonnes



Case Study Supporting families in the North East at Bilton Hall

As many as 30 children attend Bilton Hall Community Trust's holiday sessions each day, where they each receive two meals and play a host of sports activities.

The Bilton Hall Community Trust supports families in Jarrow, South Tyneside, a borough with some of the highest levels of unemployment in the country and which falls within the top 20% of the UK's most deprived neighbourhoods. During the school holidays Bilton Hall offer a life line for low income families. Alongside local children being well fed with nutritious meals every weekday for three weeks of the school holidays, the children also learn both physical and social skills from fully qualified sports coaches.

The community trust has had a membership with FareShare North East for two years, and as an independent charity it really relies on the food it receives. Deliveries include sandwich meats, fresh fruit and vegetables, yoghurts, snack items and milkshakes. But it isn't just the nutritious food that is so vitally important for Bilton Hall – it's also the huge cost savings the membership presents that make it such a valued resource.

Joanna Tuck, Community Development Manager at the charity explains: "For the cost of our monthly membership to FareShare, we could barely afford one box of sandwiches at a local supermarket, so our membership allows us to not only offer substantial, healthy meals using every ingredient, but also make significant savings in terms of our overheads. And this has had a real tangible effect on our offering."

Joanna goes on to explain that for parents and families: "Knowing their children will get an active and varied experience at the holiday programme with a team of trained and DBS checked coaches, free of charge, is a real source of comfort. Parents know their children are in safe hands and that we have their children's best interests at the heart of everything we do." There are a high number of families that struggle over the holiday period and there is an increasing demand for the holiday sessions, without having a community space such as Bilton Hall to rely on a lot of kids would end up inactive and isolated over the holidays, sat indoors while parents worked. Once children attend one session at Bilton Hall, they come back again and again.

"Thanks to the money saved, we're now looking to extend the project next year so that we can run for longer over the summer holidays – in turn helping more and more families and children over what can be a really difficult period."

Joanna Tuck, Community Development Manager

The partnership with FareShare is vital to Bilton Hall's operation, particularly during periods of additional pressure such as the school holidays – and we will continue to use it as long as we are able to."

Food for The Bilton Hall partnership is collected by FareShare under our ActiveAte campaign. ActiveAte is a national campaign aiming to raise awareness of holiday hunger and increase the provision of meals for children at risk of food poverty during the school holidays when the provision of school dinners is removed.

Appendix 1 Methodology

The full technical report that accompanies this document provides a detailed description of NEF Consulting's approach to this SROI analysis. Here we provide a shorter example of the steps NEF Consulting followed to reach an economic and social impact value focusing only on **older people** as the beneficiaries.

- The first step in the methodology was to calculate the relevant primary **beneficiary population**. Based on internal FareShare data, there are 16,015 beneficiaries of community services' CFMs whose primary beneficiary group is older people. NEF Consulting are counting only the primary beneficiaries, even though there are likely to be additional older people who benefit from the services, as secondary beneficiaries.
- The **indicator** used to measure the outcome, in this case, is the percentage of the beneficiaries who are reporting increased knowledge of the services available to them. This is derived from the 2015 SROI study of Guild Care Community Services, which included an evaluation of their day centres for older people.
- An **outcome incidence** is applied, to reflect the finding that 35% of older people who use community services' CFMs experience an increase in the aforementioned knowledge. This is also derived from the Guild Care SROI. Multiplying this outcome incidence by the beneficiary population, NEF Consulting estimate that 5,605 older people experience an increase in knowledge of the services available to them, due to their interaction with FareShare community services' CFMs. This figure of 5,605 is the **gross impact** of the CFMs' services.
- Next, a **deadweight** figure is applied. This is estimated to be 7%, based on interviews in which beneficiaries were asked to estimate the improvement they would have experienced in the absence of using Guild Care's services. Applying this deadweight indicates 1,121 older people would have experienced an increase in their knowledge of what services were available to them. By subtracting this from the gross impact of 5,605, NEF Consulting estimate that 4,484 older people experience increased knowledge relative to what would have happened anyway..
- Following this, a **first-stage attribution** figure of 9% is applied, to account for the proportion of the change in the outcome that was caused by the CFMs. This is similarly derived from interviews undertaken during the Guild Care SROI.
- Next, a **second-stage attribution** figure is applied, to account for the proportion of the services provided by CFMs of this type that can be attributed to FareShare's support of these CFMs. This is calculated at 24% for community services' CFMs.
- The previous figure of 4,484 is multiplied by 9% and the resultant number is multiplied by 24% in order to account for this process of **two-stage attribution**. This indicates that approximately 98 older people experienced increased knowledge of the services available to them, with this change being caused by their interaction with the CFM and by the CFM's services being reliant on FareShare's support. In this way, NEF Consulting estimate that FareShare's services are responsible for a **net impact** of increased knowledge for 98 out of 16,015 older people.
- In order to monetise this impact, a **financial proxy** is applied to represent the savings to the State, which result from an increased knowledge of service availability. Based on SROI studies in related areas, the financial proxy selected was the hourly wage rate of an NHS administrative and clerical staff member, multiplied by the number of hours of effort they save when their service users know which services to seek out. It was assumed, for each older person experiencing the net impact described above, one hour per week of an NHS administrator's time would be saved, for four weeks – equating to time spent initially trying to reach the older person. As the average hourly wage rate for these administrative NHS staff was £12.75 in 2017, this equates to £51 (four hours of time) in State savings per impacted beneficiary, per annum.
- The final step is to multiply this proxy by our net impact figure, which gives us the net amount of **social and economic value** generated of £5,008 per annum, for this beneficiary group, CFM type and outcome.

In addition to the desk based research and analysis of pre-existing data NEF Consulting conducted interviews with Community Food Members and Community Food Associates who receive FareShare food. These 20 interviews provided many examples of the kind of social impact that resulted from FareShare's provisions. Some of those Community Food Members and Associates are more dependent on FareShare food provision than others. When asked what the situation would be without FareShare food provision, it was recognised that some organisations could not function without it, while others use FareShare food to keep costs low so they can spend that budget allowance elsewhere.

Each organisation was asked the same set of questions, under the following headings:

- **Understanding the organisation:** The questions asked about background/contextual information, including its aims and goals. This part of the interview was used to generate an understanding of the type and number of beneficiaries that the CFM/CFA serves.
- **The project involving FareShare food:** The organisations were asked about specific projects that involved FareShare food, the outcomes they aimed to achieve, and the number of beneficiaries achieving these outcomes per year.
- **Nutrition:** Additional questions were asked about improved nutrition and whether improved nutrition contributes to achieving the outcomes noted in the previous section.
- **Attribution:** NEF Consulting asked the organisations about the concept of attribution, meaning how much of the change or impact they create might be regarded as being a result of FareShare's support. The detailed interview guide can be found in Appendix A.

Sources and references:

1. Food loss and waste in the food supply chain (FAO July 2017)
2. "650 million meals estimate" is based upon WRAP's estimate of at least 270,000 tonnes of edible food surplus being available but not being used for charitable redistribution (Quantification of food surplus, waste and related materials in the grocery supply chain, WRAP, 2016) multiplied by 2,381 meals per tonne (standard calculation provided by the Food Standards Authority).
3. '100,000 tonnes of surplus food is redistributed annually in France.' Data source FEBA, the European Food Banks Federation.
4. FAO. 2013. Food wastage footprint: Impacts on natural resources.
5. "250,000 tonnes of available food for redistribution" (WRAP Surplus food redistribution in the UK 2015-2017, WRAP, 2018)
6. "£250-£300 million in savings to frontline charities by being able to access redistributed food" based upon an annual average saving of approximately £7,900 each. Data gathered from 'Saving Money, Improving Lives: Survey of FareShare's Community Food Members', NatCen Social Research, 2015.
7. Too Poor to Eat: 8.4 million struggling to afford to eat in the UK, Food Foundation 2017
8. Too Poor to Eat: 8.4 million struggling to afford to eat in the UK, Food Foundation 2017
9. Ending Hunger in the Holidays, Feeding Britain, Dec 2017

Address: FareShare UK,
Unit 7, Deptford Trading Estate
Blackhorse Rd, London, SE8 5HY

fareshare.org.uk
Facebook.com/UKFareShare
Twitter.com/FareShareUK

Registered Charity Number 1100051