

Crowdsourcing support to solve complex social problems

An impact analysis of a new approach



beam

Authored by Jack Webb, Beam
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Executive Summary

Crowdsourcing is an approach to solving problems in which many people come together online to make a small contribution to the solution. It is growing rapidly in popularity. However there is little data available on its impact, especially when applied to social problems.

This report takes an in-depth look at the impact of Beam, a social enterprise that crowdsources financial and social support to enable unemployed people to secure stable work by filling skills shortages in the economy. The report analyses the outcomes of 227 people who were supported by Beam's crowdsourcing approach, in order to provide greater transparency for other organisations considering crowdsourcing.

Findings from this report show that Beam's approach of crowdsourcing employment support has a positive impact for individuals using the service and society more widely:

- **76% success rate of people** who crowdsource employment support with Beam going on to start paid work.
- **£31,300 cashable savings** for the taxpayer for each person who starts work after crowdsourcing employment support. On average, £7.41 is saved for every £1 crowdfunded.

The benefits of crowdsourcing support include:

1. **Removing financial barriers:** Crowdfunding brings in new capital to remove all financial barriers, including those that are currently underfunded or complex to remove. Beam's approach targets the financial barriers that stop people getting into work.
2. **Providing social support:** Support from the crowd, whether in the form of confidence-boosting messages or offers of work experience, can provide people with a network of support as well as professional connections that they would not otherwise have access to.
3. **Adapting to the strengths and needs of the person:** As each campaign is different, the approach is inherently flexible and aligned with a strengths-based approach that empowers the person being supported.

The approach outlined in this report is now an established model to support unemployed people into well-paid work, allowing them to support themselves for the long-term. There is an opportunity to expand this approach to work with many more people, as well as to use crowdsourced approaches to solve other social problems.



Tony working as an electrician



Decoda graduating with Level 3 Health & Social Care Diploma

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Foreword



By **Geoff Mulgan**

Professor of Collective Intelligence, Public Policy and Social Innovation at University College London

I was intrigued by Beam the first time I heard of it. It was bringing back the directness of some traditional charity – people directly helping other people – but combining it with the new methods of crowdsourcing. I also liked the fact that it was a novel approach that built on what was known about helping people struggling with their lives, and that it seemed to work.

I've been involved in homelessness for decades, from both the bottom up and the top down. As teenager I volunteered in shelters, making and serving meals. Then a few years later I had the chance to see the problems from above, shaping the government policy that for more than a decade helped radically reduce numbers sleeping on the streets (sadly the last 10 years saw many of those gains reversed).

Beam sits in between the top down and the purely bottom up – a model that links people, money, talent and potential, and that can engage local authorities as well as citizens. It recognises that needs are complex, and that lack of a job or a home are usually bound up with many other issues. But its premise is simple. It says to people who feel troubled walking by others who are either living on the streets or clearly out of work: here is a way to help that is practical and goes well beyond a shelter for a night. And its method is in some ways simple too – aiming to remove whatever barriers stand in the way of a job, whether financial barriers, transport, childcare or training. It then offers a personalised way to help people into work, achieving the human aspect of turning your life around that is often so hard for bureaucracies and welfare systems, the feeling of being cared for and willed on.

Part of the appeal for me is that their approach accords with a lot of evidence. We know that not having a job has really bad effects on wellbeing – especially if others are doing well (it's oddly easier in a period of mass unemployment). We know that the longer you're out of work the harder it is to get back in, and the fact that the people helped by Beam were out of work for an average of five years means that this was not an easy group to work with. We know that a mix of skills, experience confidence and connections makes the difference, and decades of research have confirmed that the most valuable help in getting a job is not usually your close friends but rather 'weak ties' – acquaintances and strangers who can point you in the right direction. And crucially, the research shows that something changes when you know others believe in you, especially if they've shown they're willing to invest in you.

So, the evidence in this report is heartening. It confirms the hunches which got Beam kicked off, and shows, through numbers, the impacts being achieved.

Beam is one of many experiments now underway to find out how crowds can become part of solving social challenges – whether through crowdfunding or crowdsourcing, gathering everything from data and ideas to money and time from a willing public. Not all of the ideas that mobilise crowds work, and it's only

through testing ideas out in the real world that we can learn what really works and which models click in aligning the motivations of givers with real needs. This is another reason for commending Beam for their willingness to experiment and measure.

Their approach is not going to be a panacea or a silver bullet. Nor is it an alternative to a welfare state. But it is right that responsibility for dealing with entrenched problems should be shared – and that we as citizens should play our part. That's only common sense and my sense is that there are millions of people who would like to be able to help in another way beyond just paying their taxes.

I hope that we can now see the Beam approach grow and spread. There should be big benefits in terms of visibility and brand awareness; there are big potential economies of scale in the platform itself and the algorithms it uses; and more data will mean more ways to fine tune and improve.

But ultimately this is about people: about seeing someone who's been less lucky than you and doing something about it rather than just walking by.

About this report

About crowdsourcing

Crowdsourcing is an approach to solving problems in which many people come together to make a small contribution to the solution. In its modern form, it uses Internet-based platforms to allow people to work together easily. It can either be focused on collecting money (called “crowdfunding”) or contributions of other types - for example, volunteering or data.

Numerous examples of crowdsourcing exist today, broadly split into two categories:

- **General crowdfunding platforms.** Platforms available for anyone to use, normally focussed on raising money. Examples: [Kickstarter](#), [GoFundMe](#), [Crowdfunder](#)
- **Issue-specific crowdsourcing:** Organisations that are designed to solve one specific problem using crowdsourcing. These may combine crowdfunding money and crowdsourcing other types of support or data. Examples: [Watsi](#), [CrowdJustice](#), [Ushahidi](#), [Missing Maps](#), [Beam](#)

The potential for crowdsourcing grows every year, with over £8bn raised globally in crowdfunding in 2018¹. The Covid-19 crisis has seen a particular breakthrough for the use of crowdfunding in the public sector, with local authorities in the UK launching crowdsourcing campaigns to support local communities².

This report finds that there is significant potential for new crowdsourced approaches to help solve a wide range of complex social problems. However, there is currently little data in the public domain³ about how crowdsourcing works in practice and even less analysis of its impact (both in terms of social outcomes and economic impact).

About Beam

[Beam](#) is an example of a specific “problem-first” crowdsourced approach; Beam crowdsources employment support for unemployed people in the UK and helps them move into stable work. Many of these are long-term unemployed people who are rough sleeping or living in temporary accommodation. Members of the public can visit [Beam’s website](#) to read the stories of individuals looking for help and then provide financial and social support to enable them to start work.

Beam is a social enterprise that launched in London in 2017. Since launching, Beam has worked with the Mayor of London, local authorities in London and leading homeless charities including St. Mungo’s and Shelter. Beam has raised over £1 million in crowdfunding to date.

About this report

This report provides an impact analysis of real-life data from Beam’s work so far in order to provide transparency to other organisations interested in crowdsourcing to solve social problems. The data has been analysed by Beam in collaboration with social impact measurement organisations. It is based on the 227 service-users who were supported by Beam between September 2017 and April 2020.

The report focuses on Beam’s work on the problem of long-term unemployment, although we believe that the general principles contained in the report could inform approaches to solving other social problems.

¹ [Valuates 2019](#)

² E.g. [Lambeth](#), [Mansfield](#)

³ Nesta have published reports on the opportunities of crowdfunding (e.g. [here](#) and [here](#)). The University of Westminster Press has published “[Cultural Crowdfunding: Platform Capitalism, Labour and Globalization](#)”.



James working as a security guard



Monique training to be a beautician

The unemployment trap

In the UK there are 3.7 million working-age adults who claiming welfare while out of work, with 2.5 million of those unemployed for over a year. This costs the government £32bn every year in welfare costs⁵. Unemployment is expected to increase further in the aftermath of the Covid-19 crisis.

Furthermore, unemployment has wider consequences including an increased risk of homelessness⁶, an increase in reoffending rates⁷, reduced integration for refugees⁸ and a worse quality of life for care-leavers⁹. These risks are exacerbated for people who suffer from multiple disadvantages, such as being a single parent, a victim of domestic violence or having mental health problems¹⁰. For many, good employment can be a crucial step towards long-term independence and stability.

Beam conducted interviews with service-users who are unemployed and who have some of the vulnerabilities mentioned above. Many people are stuck in an 'unemployment trap' where they want to move off benefits and into work but cannot find the support they need to help them:



“ I wanted to do something but had no resources, money. I don't want to be on benefits and I am fully capable. But I had no choice to be in that situation. ”

-Sara, 29



“ Someone like me should be working but can get stuck on benefits... people just need a little bit of a helping hand and a boost. ”

-Regina, 30

These systemic issues resulted in individuals losing confidence, making change even more difficult:



“ I lost my confidence for seven years... I wanted to quit everything. My life condition was so hard. For me, I never imagined myself working in an office in a big company. ”

-Imen, 32

⁴ Source: [DWP StatXplore](#) figures for Universal Credit (with "Not in Employment" indicator), JSA and ESA 2019. ONS unemployment statistics only include adults who are "economically active", these numbers include all adults.

⁵ £20bn from ESA and JSA (and Universal Credit equivalents) and £12bn estimated spend on housing benefits for those who are unemployed.

Sources: [DWP](#), [OBR](#), [DWP StatXplore](#)

⁶ [NPC; Nelson et. al](#)

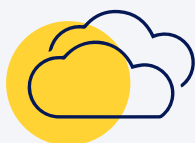
⁷ [Ministry of Justice](#)

⁸ [Nuffield Foundation](#)

⁹ [Joseph Rowntree Foundation](#)

¹⁰ [Lankelly Chase](#)

From these interviews we identified that there exists a cohort of unemployed people who could work but face four barriers¹¹:



Poor wellbeing

After many years of personal difficulty, people often do not have the confidence or the support needed to make a significant change to their lives.



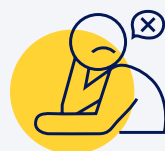
Poor wellbeing

There are prohibitive costs that can stop people starting work, including childcare, equipment, laptops that allow people to apply for jobs and the costs of training.



Limited incentives

Most available jobs are unstable and poorly-paid and thus are insufficient to help someone move into long-term stability. There are well-paid and stable jobs in areas of skills shortages, but these require training.



Inflexible support

The support that is available is often 'one-size-fits-all' without being able to adapt to the needs and strengths of the person.

There are programmes that aim to support people back into work, ranging from government support (Job Centre Plus, the Work programme, the Work and Health programme) to third sector support (e.g. Working Chance) and employer access programmes. These often solve some of the above points and can form part of a solution. However, none of these programmes address all four barriers: for example, government programmes are not optimised to support people into well-paid work, and third sector programmes do not have the funds to remove financial barriers. Therefore, people remain stuck in the unemployment trap for many years.

¹¹Note that some people have other barriers stopping them from working (e.g. mental health problems or substance abuse issues). These may require a different solution, which is addressed in the next section.

A crowdsourced solution

The problems outlined in the previous section which lead to an unemployment trap are well-suited to being solved with a crowdsourced solution. Below, we will revisit the four barriers to show how crowdsourcing can remove them. First, we will outline one such crowdsourced solution using the example of Beam.

Beam focuses on crowdsourcing support for unemployed people who are homeless and living in temporary accommodation, as well as those who are at risk of homelessness (whom Local Authorities have a duty to support under the Homelessness Reduction Act). They were unemployed for five years on average before starting Beam's programme.

Beam's approach has five stages:



01/

Referral

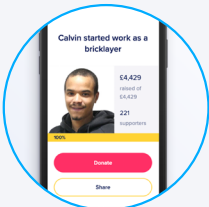
Each person is referred by government or charity partners.



02/

Caseworker assigned

Each person is supported by a caseworker to plan a career personalised to their strengths and ambitions.



03/

Career crowdfunded

Beam crowdfunds all costs required for their new career - rapidly removing all financial barriers. Supporters also leave messages of support for the service-user.



04/

Training

Where useful for their chosen career, people are trained by vetted third parties in courses that will lead to stable work.



05/

Work

Each person is supported to find stable work. Work opportunities can come from the campaign's supporters.

Throughout the process people update their supporters, leading to an ongoing relationship with the supporters.

Advantages of crowdsourcing support

Data shows that this crowdsourced approach can tackle the four barriers to employment that people face:

- **Creates new support networks:** The average person has received 115 messages of support, creating an ongoing relationship with supporters throughout the service-user's journey as they post updates. One service-user gave feedback that *"The thing that affected me most is the messages - people saying 'don't give up'. I read them all 1 by 1 and it made me confident to go to my goals and not give up... Your messages were worth more to me than any amount of money."*
- **Removes financial barriers:** The average campaign raised £3,200, with 100% of campaigns funding fully. Costs for individual budget items are as high as £5,800 (for engineering courses).
- **Enables access to well-paid work:** The resulting work is well-paid and motivating, with an average salary of £28,000 for full-time work and a job satisfaction score of 8.2 out of 10 on average. Further analysis of work outcomes is contained in the next section.
- **Aligns with people's strengths and needs:** As each campaign is different, the approach is inherently flexible and aligned with a strengths-based approach that empowers the person being supported. Service-users so far have targeted more than 50 careers. Crowdfunding can address specific needs, such as the costs of childcare for single mothers.

The combination of these four benefits creates an advantage for crowdsourcing over other employability interventions. Compared to government programmes and most third-sector employability interventions, the crowdsourced approach is able to invest more money in service-users while simultaneously addressing the root causes of their unemployment, such as poor wellbeing and lack of confidence. Even compared to well-funded third-sector interventions that can remove large financial barriers, the social support from crowdsourcing has important benefits that financial investment alone cannot recreate. The service-users attribute a large amount of their success to the social side of crowdsourcing, with 72% of people interviewed at the end of their Beam journey specifying that the social support from members of the public contributed to their outcome.

Further analysis of the impact of crowdsourcing in comparison to other interventions is contained in the next section.

Managing potential risks in crowdsourcing

Crowdsourcing can provide a great experience for both service-users and supporters. It is important to also look at the risks and limitations of crowdsourcing, and how they can be managed.

Some people have different barriers to getting into work than those identified in the previous section - for example, severe mental health problems or substance abuse issues - which may require specialist

support rather than crowdsourcing. At the start of the Beam journey, the potential service-user meets with Beam to discuss whether crowdsourcing is right for them. When it isn't, Beam refers potential service-users to partner organisations who are better placed to help and, where possible, creates a plan for the service-user to join Beam's programme in the future.

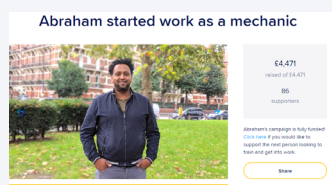
Potential service-users often worry that their campaigns won't fund. Beam solves this in two ways: a supporter can sign up to give to a different campaign each month and an algorithm distributes this to the campaign that needs it most; and there is no time limit on campaigns funding so they remain on the website until funded. Therefore, 100% of campaigns fully fund.

As crowdsourcing is public, this brings risks of the service-user being identified by someone who puts them at risk. There is no identifiable or traceable information about individuals on their campaigns (for example, people use only first names and can use a different first name, and training providers are not identified). For people who are at greater risk, there are no photos of the person.

Why members of the public participate in crowdsourcing

A crowdsourced solution wouldn't work unless it also provides a valuable experience for the supporters who come together to provide help. So far 5,900¹² people have donated money to the campaigns on Beam, with the average person donating on more than five occasions. As the people looking for support do not have large networks, supporters are almost exclusively strangers who are motivated to help. This community of supporters has grown through PR and word-of-mouth, with no paid marketing.

The average rating of Beam from supporters was 9.4 out of 10. When surveyed, three key reasons emerged for why supporters enjoy participating in crowdsourcing:



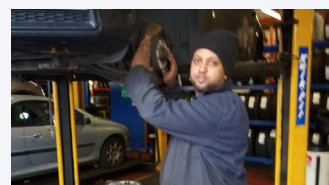
Personal

The campaign-focused aspect of crowdsourcing means that supporters see exactly who they are supporting, get to know their story and feel personally involved in their journey. The supporters are updated on the service-users' progress through training and into work.

Level 2 in Motor Vehicle Maintenance & Repair	£2,795
Extra driving lessons, Pass Plus and 2 driving tests (est.)	£779
Travel to course	£437
Boots	£30
Overalls	£30
Contingency	£400
Total	£4,474

Transparent

100% of donations go towards the cost of items in a specific person's budget, which is broken down to the nearest pound¹³. Supporters can also see the outcomes of the people they supported.



Long-term

Supporters are directly helping someone to change their lives in a sustainable way, by removing the barriers that stop them from getting into work.

When a service-user drops out of the programme without starting work (see the next chapter for an analysis of success rate), Beam notifies supporters with a message agreed with the service-user and offers a refund of any funding not yet spent. Rather than this diminishing the supporters' view of Beam, this is often received positively. Supporters very rarely ask for a refund and more often donate more to other campaigns as they appreciate the transparency and the honesty about the difficulties that service-users face.

¹² Accurate as at May 2020

¹³ Supporters have the option to add a tip that goes towards Beam's running costs, but the majority of the running costs are funded by separate funders including government partners.

Campaign examples

Christianah started work as a dental nurse



100%

£4,557
raised of £4,557

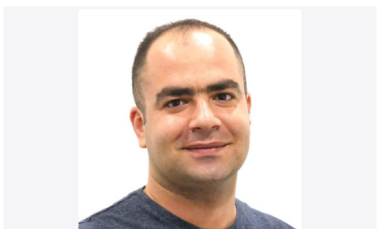
223
supporters

Christianah's campaign is fully funded! Click here if you would like to support the next person looking to train and get into work.

Share

Christianah is a single mother who was formerly homeless and who raised £4,557 from 223 supporters for dental nurse training and childcare. She is now working as a dental nurse.

Javad started work as a digger operator



100%

£4,324
raised of £4,324

600
supporters

Javad's campaign is fully funded! Click here if you would like to support the next person looking to train and get into work.

Share

Javad is a refugee who had trained in civil engineering in his own country but was living homeless and unemployed in the UK. He raised £4,324 from 600 supporters for a digger operator course and has started work as a digger operator and moved into private-rented housing.

Emma started work as a beautician



100%

£3,630
raised of £3,630

300
supporters

Emma's campaign is fully funded! Click here if you would like to support the next person looking to train and get into work.

Share

Emma was a homeless woman who raised £7,475 from 809 supporters (over 2 campaigns) to fund a Beauty Therapy diploma. She is now working as a professional beautician and has moved into stable housing.

Ryan started work as a lorry driver



100%

£4,329
raised of £4,329

508
supporters

Ryan's campaign is fully funded! Click here if you would like to support the next person looking to train and get into work.

Share

Ryan is a military veteran who raised £4,329 from 508 supporters to fund the costs of training and licensing to be a HGV driver. He has now started work and has moved into permanent social housing.

Messages of support for Abdullah, training to be a hairdresser

Terence Thorne I am really pleased that things are going well for you Abdullah. Your hard work is paying the dividends you deserve. Keep it up and I look forward to hearing about your further progress.

Michael Richmond Great stuff, Abdullah. Good luck in the rest of your course.

Montana Gerry Great pic! :) Best of luck with your training!

Peter Long Hey Abdullah great to hear you're doing so well. You look really cool in the photograph. Stay with it and enjoy. Wishing you all the very best for the future.

David Burns I hope your world brightens further and that your work and future brings much happiness. Share the love always.

Joy Worth Wishing you all the very best for the future and congratulations on all your hard

Joy Worth work and efforts

Claire Miller Good luck Abdullah!!

Saliha S It's so great to hear that your course is going well Abdullah 😊👍



The impact of crowdsourcing employment support

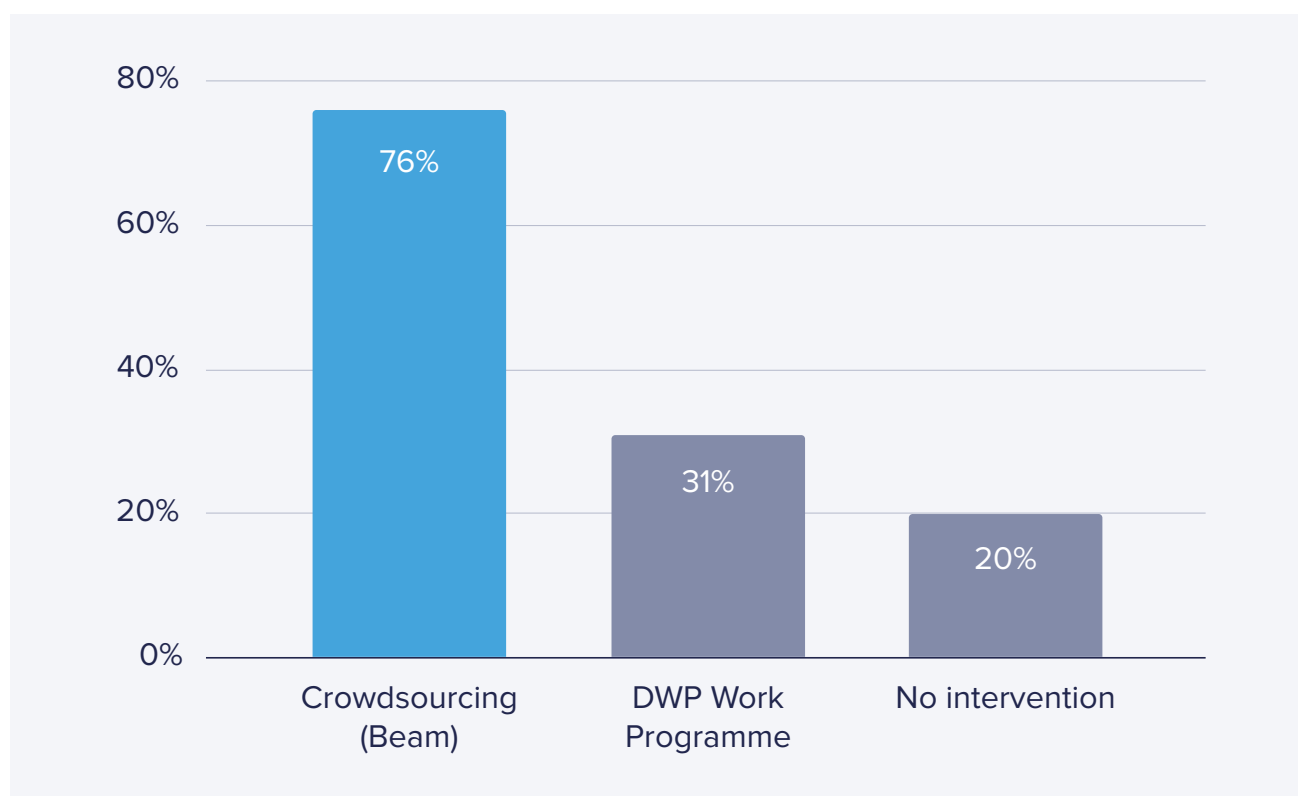
In this section, we will analyse the impact of this crowdsourced solution in two ways: social outcomes for the individuals supported and economic impact for the government and taxpayer.

The analysis uses Beam's data on 227 people between September 2017 and April 2020. Further demographic data can be found in the appendix.

Comparator data is from published studies and government data. In particular, for employment outcomes we have compared with the Department of Work and Pension's [Work Programme](#) as it uses a similar cohort to Beam¹⁴ and has data available. We also compare against the 'no intervention' employment rate, defined in the Work programme to benchmark providers against.

Social impact

Graph 1 : Percentage who start work with crowdsourced support versus comparisons¹⁴



¹⁴ Source for comparison data is [Work Programme Statistics](#) and [Work Programme Provider Guidance Chapter 12](#). See Appendix 2 for details on the comparability of cohorts in the Work Programme and Beam.

As Graph 1 shows, 76% of people who crowdsource employment support using Beam's approach move into paid work.

This is 2.5x the work outcome rate of the DWP Work Programme and 3.8x the amount of people who would be expected to start work with no intervention¹⁵.

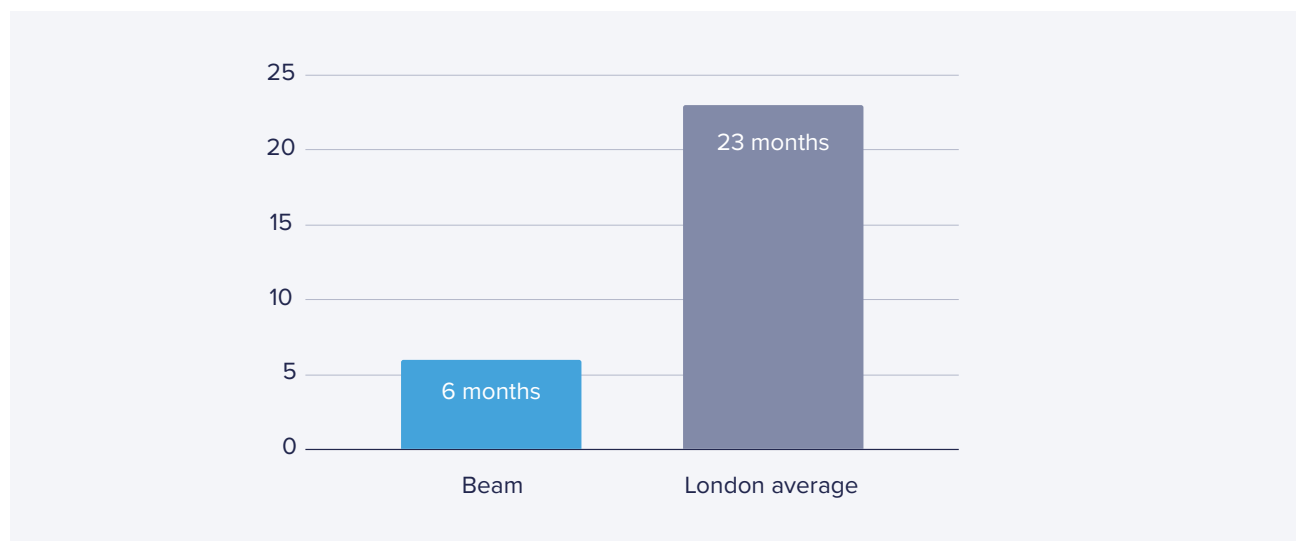
Furthermore, the work outcomes achieved by Beam service-users were of a high-quality:

- 75% of the people who move into work sustain it for 3 months. This compares to 67% sustainment on the Work Programme.
- Average salary for full-time work is £28,000. This is 30% higher than the London Living Wage.¹⁶

The majority of outcomes were achieved following crowdfunded training, with 94% of people completing their training. The most common training courses were electrical installation, dental nursing and accounting. The average increase in earnings for people who started work was £8,900 annually, even including the reduction in benefits. This is a 280% return in the first year on the average crowdfunded campaign (£3,200).

Work outcomes create the conditions for long-term independence for the service-users. Of the people who have started work who were living in temporary accommodation when referred to the programme, 56% have moved into stable housing. The average time between campaign launch and moving into stable housing is 6 months, a 74% reduction versus the average stay in temporary accommodation in London of 23 months (see Graph 2).¹⁷

*Graph 2 : Average months until moving out of temporary accommodation for Beam service-users versus London average*¹⁸



Feedback from the service-users themselves has shown a high degree of support for the crowdsourced approach. The average rating for the service from service-users was 9.8 out of 10.

¹⁵ "No intervention" still includes people engaging with Jobcentre Plus at the base level required for their level of welfare

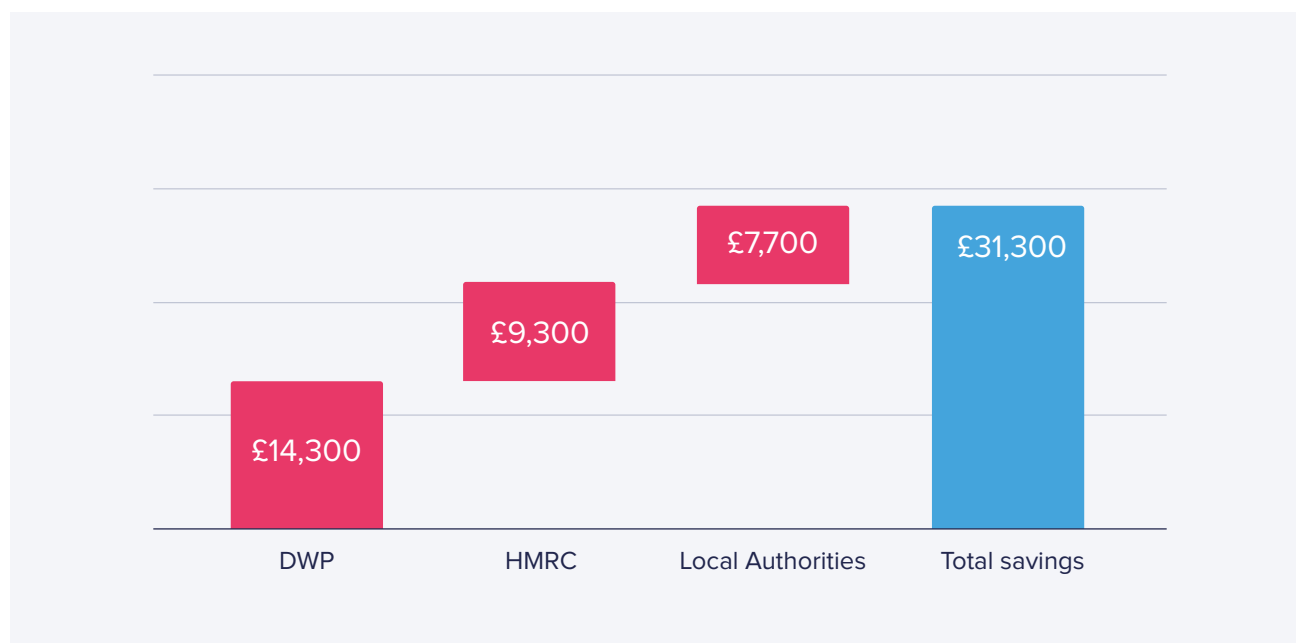
¹⁶ London Living Wage is £21,000.

¹⁷ London average calculated from [Temporary Accommodation Live Tables, Table 779](#)

¹⁸ London average calculated from [Temporary Accommodation Live Tables, Table 779](#)

Economic impact

Graph 3: Cashable savings per person starting work with crowdsourced support



Calculation methodology

The calculations measure the increased savings from Beam's approach compared with the alternative that would have taken place without Beam's intervention, based on UK government data. The costs are calculated over the timeframe in which the majority of savings are realised (and for which it is possible to reasonably forecast outcomes): for employment costs this is three years and for housing costs this is two years. Detailed methodology for the calculations can be found in the appendix.

Cashable savings

Crowdsourcing employment support results in cashable savings to several government departments:

- Department of Work and Pensions saves £14,300 per person due to a reduction in welfare spending
- HMRC gains £9,300 per person due to extra taxable income
- Local authorities save £7,700 per person due to a decrease in housing spending (for the cohort that Beam has worked with) and a decrease in council tax support.

In total, the approach saves £31,300 per person who starts work. As 76% of people start work, this means that there is an average saving of £23,800 for all people who launch a crowdfunding campaign.

With an average crowdfunding campaign size of £3,200, this means that £7.41 is saved for every £1 crowdfunded. In total, Beam's £1 million crowdfunded will lead to £7.4 million in cashable savings for the government.

The calculation focuses on the immediate cost savings that apply to the majority of service-users. There will be further financial benefits for some service-users with other government departments. A notable example is the Ministry of Justice: 28% of people in Beam have a history of offending but only 3% of people have reoffended after joining Beam¹⁹. This is consistent with analysis from the Ministry of

Justice²⁰, which states that employment is linked with a significant reduction in reoffending for those released from custody. Each person who doesn't reoffend saves £1,500 on average per crime and up to £38,000 for each year in prison avoided.²¹



John training to become an electrician



Grace working as a phlebotomist

¹⁹ This is measured in the timeframe of the service-user's participation in Beam's programme, and we are gathering further data on the longer-term impact

²⁰ [Ministry of Justice, 2013](#)

²¹ [Unit Cost Database](#)

Vision for the future

Three years since launch, Beam has crowdfunded £1 million to help hundreds of people access skilled work. In the next three years Beam's vision is to build on this foundation, expanding the service to a wider variety of geographical locations and to cohorts beyond people who are homeless or at risk of homelessness.

This report provides a case-study in the power of crowdsourcing, but we believe that the lessons in this approach have the potential to improve millions of lives when at scale. The results so far wouldn't have been possible without collaboration with government and partner organisations.

To conclude the report, we offer our key takeaways for government and social innovators from what we have learnt so far, so that together we can use the power of the crowd to solve the most difficult social problems.

Local and Central Government

- 1. Stimulate innovation in employment services:** Employment services are relatively unchanged in the last decade. Beam's progress suggests there is scope for innovation that may lead to significantly improved outcomes and taxpayer savings. If a crowdsourced approach was expanded to work with 600,000 people (the number the National Audit Office state are long-term unemployed but close to work²²), the total savings would be over £10 billion²³.
- 2. Use technology to enable lower-cost services that tap into the power of the crowd:** Solutions to complex social problems must combine personalised approaches with the scalability and efficiency of technology. Crowdsourcing is an established approach that harnesses the power of communities to deliver concrete outcomes in a way that is both personalised and scalable.
- 3. Further support outcomes-based payments:** Outcomes-based payment, sometimes known as "Payment by Results", is a commissioning model that can lock in transparent taxpayer savings by linking payments for services to the achievement of outcomes and cashable savings, such as those identified in this report.

Social enterprises and charities

- 1. Embrace issue-specific crowdsourcing:** We believe that issue-specific crowdsourcing will become mainstream in the next five years. Beam's example has shown that it can create positive outcomes, taxpayer savings and an excellent experience for service-users and donors. We think that there are many opportunities for this model to be extended to many other areas, from crowdsourcing support for newly arrived refugees to revolutionising how equipment is funded for people with disabilities.

²² [National Audit Office, 2019](#)

²³ Assuming that success rates and economics continued at the current level (although excluding the specific housing savings of Beam's cohort).

- 2. Empower individuals and default to transparency:** If issue-specific crowdsourcing is not right for your organisation at the moment, you can still learn lessons from the advantages of the model. Two such lessons are: a strengths-focused, personalised approach can bring huge benefits to individuals who all have different backgrounds and goals; and donors love to see transparency over who they are helping, where their money is going and the impact that their donation has had.



Gary training as a plumber



Sabrina training as a beautician



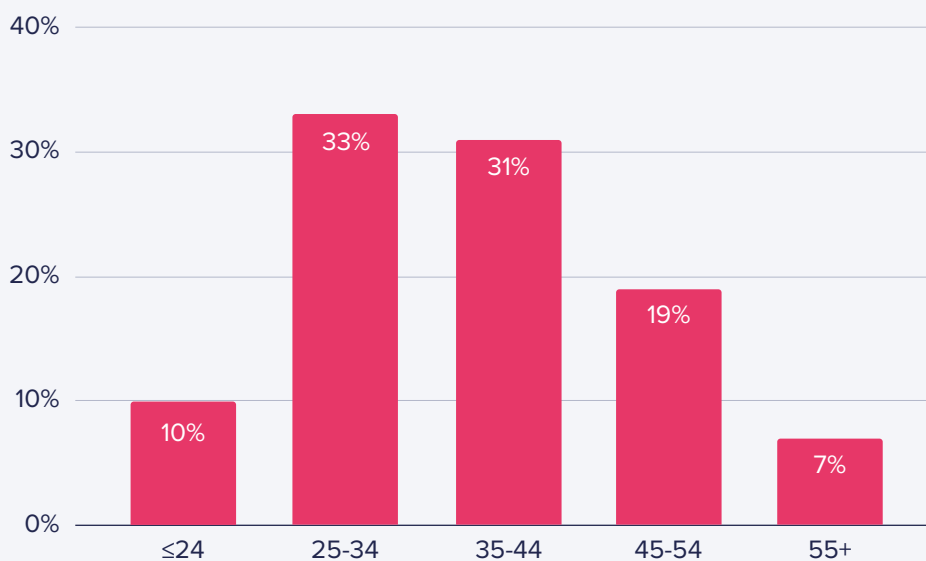
beam

www.beam.org

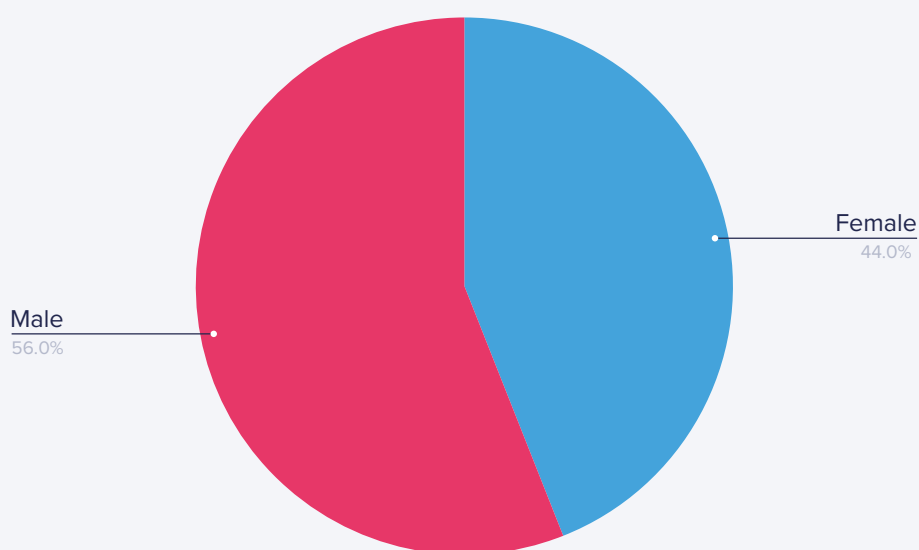
Appendix 1: Demographics of service-users in impact data

227 service-users are included in the data set. This is everyone who launched a campaign on Beam between September 2017 (when Beam launched) and 30th April 2020.

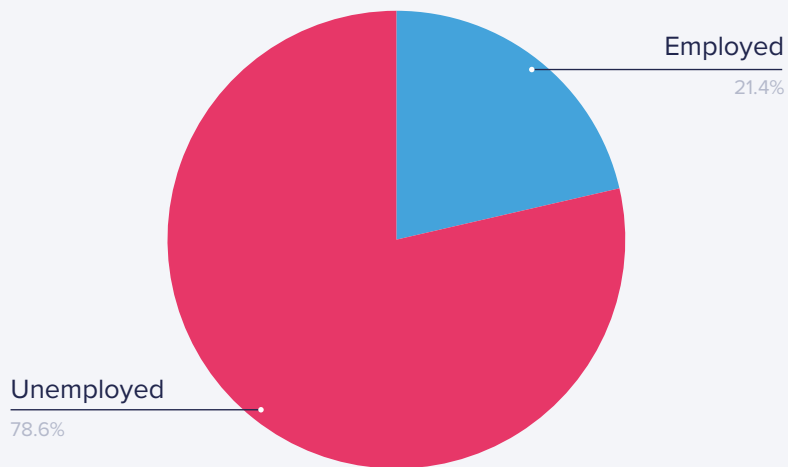
Age



Gender



Employment status when joining Beam



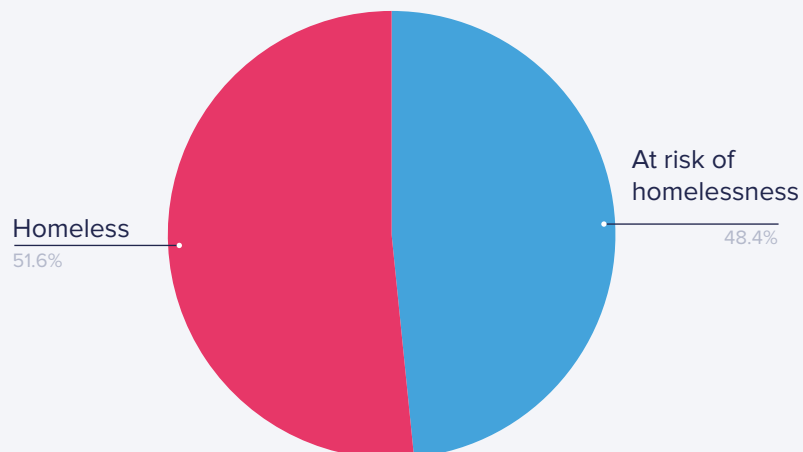
Average time unemployed for those unemployed: 5 years

All of those employed were in low skilled jobs, with 65% in part time work and an average salary of £8,800. Therefore, all service-users were looking for new, higher-quality work and are included in employment success rate calculations.

Parallel needs

- 43% are single parents
- 30% have a history of substance abuse
- 14% have been refugees
- 28% have an offending history
- 23% have a history of rough sleeping
- 10% are care leavers

Housing Status when joining Beam



Career path

Service-users followed 57 different careers. The most common include electrician (26 people), healthcare assistant (15 people) and accountant (11 people). The careers chosen fall into the following categories:

- 17% Healthcare & Social work
- 16% Construction & Building services
- 16% Energy & Utilities
- 9% Law & Business
- 7% Administrative
- 7% Retail & Service
- 7% Hair & Beauty
- 6% Education & Childcare
- 6% Security
- 3% Food
- 6% Other



Alla launching campaign

Appendix 2: Cashable Savings Calculations

Parallel needs

The calculations in the report follow a ‘social return on investment’ methodology to assess the financial savings that the government realises as a result of Beam’s programme. We calculate the cashable savings per person who starts work as a result of Beam’s intervention.

Cashable savings are defined as the increase in money that the Government gains as a result of the intervention^{24, 25}.

We calculate four types of cashable savings:

- Savings to DWP from reduction in benefits spending
- Increased tax received by HMRC
- Savings to Local Authorities from reduction in spend on temporary accommodation and associated support costs
- Savings to Local Authorities from reduction in Council Tax Support

Deadweight: We calculate the savings that Beam’s intervention has made compared to what would have been expected to happen without Beam.

- For employment related costs, the comparison is the employment rate for unemployed people with no intervention, as estimated by DWP.
- For housing related costs, the comparison is the average amount of time that a household spends in temporary accommodation in London.

There is no displacement included (i.e. outcomes from Beam’s intervention do not lead to a reduction in outcomes elsewhere).

We attribute the outcomes to Beam, as Beam service-users do not work with any other employment support organisations whilst working with Beam. Beam collaborates closely with a wide variety of partners who are essential to the wellbeing of Beam’s service-users (for example, accommodation providers) but these were assumed not to make a direct contribution to an employment outcome.

The calculations cover several years, according to the length of time for the majority of cashable savings to be realised (and which can be predicted reasonably accurately). For savings in future years, we calculate a Net Present Value using a discount rate of 3.5% as recommended by HM Treasury²⁶, and excluding the cost of capital.

All data from Beam comes from Beam’s customised data recording system, and has been captured by caseworkers from meetings with service-users. Where possible, evidence was provided for outcomes. All data about comparisons come from official UK Government statistics or robust studies by other organisations. All sources are provided in footnotes

²⁴ [Parliamentary guidance](#)

²⁵ [Good Practice in Local Government Savings](#), DCLG

²⁶ [HM Treasury Green Book](#)

Comparability of Beam's cohort with Work Programme²⁷

In the report we compare Beam's results to the results of the Work Programme and the 'no intervention' employment rate defined in the Work Programme guidance. We must check that these cohorts are a fair comparison.

- Demographics: The two cohorts are broadly similar.
 - Work programme: Average age 36; 64% male
 - Beam: Average age 37, 56% male
- Welfare status: Based on benefits received at the start of the intervention, those in the Work Programme were seen to be closer to work on average than Beam service-users. However, there are significant data gaps for Beam due to how Universal Credit data is recorded
 - Work programme: 81% JSA, 19% ESA
 - Beam: 27% JSA, 73% ESA (Note that this data only covers around a third of Beam's service-users - most service-users are on universal credit where a claimant's closeness to work is contained within their conditionality group, which has not been recorded for Beam service-users until recently).
- Differences:
 - Geographic region: the Work Programme is a national programme and Beam only operates in Greater London.
 - Ethnicity: 17% of Work Programme participants were BAME, whereas 64% of Beam's service-users are BAME.
 - Single parents: 8% of Work Programme participants were recorded as single parents, whereas 43% of Beam's service-users are single parents

Therefore we see that there are large similarities between the Work Programme's cohort and Beam's, as well as some differences. The differences fall on the side of making Beam's cohort appear harder to get into work (e.g. more were on ESA, more were single parents with childcare responsibilities), so despite the differences we can still be confident of Beam's better results. As more statistically rigorous methods for comparisons (e.g. randomised trials, propensity score matching) were not possible within the constraints of this report, the Work Programme was seen to be an acceptable comparison.

²⁷Source for Work Programme Cohort data: DWP Stat-Xplore

DWP

DWP (Department of Work and Pensions) will pay less in unemployment benefits and Universal Credit as more people are employed.

Methodology:

- Calculate the employment rate for Beam service-users, and compare this to expected employment rate without Beam.
- Calculate the difference in DWP benefits spending for people out of work versus people in work to find the cost saving per person in work.
- Apply the increased % of people in work to the cost savings for each person in work to calculate the cashable saving.

We calculate the cost savings over a period of three years after the service-user starts work. Three years was chosen for two reasons: firstly, based on the comparison employment rate of 20% a year, over half of the cohort would have started work in the first three years and thus the majority of comparative cashable savings will be realised in the first three years; secondly, it is reasonable to predict employment rates for three years but this estimate becomes less accurate further into the future. It is probable that there will be additional cashable savings after three years but these are excluded here, thus making these calculations a conservative estimate of the total savings.

As we are looking at the cost savings from people employed, the employment rate in the first year is 100%. For the second and third year, we apply Beam's sustainment rate, which is 75%. This is the three month sustainment rate, which is the most accurate sustainment figure that Beam has. This does not necessarily mean that they are in the same job, just that they are still in work.

For no intervention we take a Year 1 employment rate of 20%, as specified by DWP in the documentation for the Work Programme²⁹. For Year 2 and Year 3, we add in a further 20% of people starting work and assume sustainment rate of 67%, which is the sustainment rate in the Work Programme³⁰. Note that 'No intervention' still includes people engaging with Jobcentre Plus at the base level required for their level of welfare, and just entails in DWP's guidance that no specific employability programme is working with the service-user.

For these calculations, we are assuming that everyone is unemployed at the start. This is the case for 79% of Beam service users, and those who are employed are typically working part-time on a low salary (£8,800 on average) and thus are still receiving benefits and so can be assumed to be unemployed from the point of view of DWP spend.

Combining these two employment rates, we can look at the increase in employment over the three years, for people who start work with Beam.

	Year 1	Year 2	Year 3
Beam employment rate	100%	75%	75%
"No intervention" employment rate	20%	33%	42%
Employment uplift	80%	42%	33%

²⁸ Source for Work Programme Cohort data: DWP Stat-Xplore

²⁹ [Work Programme Provider Guidance Chapter 12](#)

³⁰ [Work Programme statistics](#)

Now we have the difference in employment rates over 3 years, we can apply these figures to the savings per person employed. Due to the introduction of Universal Credit, we cannot use standardised figures as every household receives different amounts of benefits depending on their circumstances. Instead, we use Beam data to look at the average savings. Of the people who were employed after working with Beam (to allow for a like-for-like comparison) :

- Before Beam they received £1,026 per month in benefits on average
- After starting work they received £235 per month in benefits on average
- Therefore the average reduction in benefits after starting work is £790 monthly or £9,484 annually.

For simplicity, we assume that the reduction in benefits for each person employed is the same for Beam service-users and for people employed with 'no intervention'. In reality, this will underplay slightly the cost benefits from Beam as Beam salaries are higher than what would be expected for 'no intervention' (see HMRC calculation below). Therefore, employed people from 'no intervention' would be expected to receive more Universal Credit after they are employed, and hence the reduction in benefits would be lower in the comparison case that we have assumed.

So applying the percentage difference in employment rate to the cost savings per year, we get the following results:

	Year 1	Year 2	Year 3
Employment uplift	80%	42%	33%
DWP Cashable savings	£7,587	£3,945	£3,094

Calculating the NPV, we get a total cashable savings figure of £14,288 per person in work for DWP from Beam's intervention.

HMRC

HMRC will collect higher amounts of income tax and national insurance as more people are in work and they are paid a higher salary.

Methodology:

- Use the same employment percentages as above.
- Calculate the average salary for Beam service-users and "no intervention" and use this to determine the income tax and National Insurance paid in each case
- Apply the % of those in work to calculate the higher amount of income tax paid by Beam service-users in work

Those who start work after Beam's programme have an average salary of £25,080 (the average salary for those in full-time work £28,000, whereas this takes into account people in part-time work as well for completeness). The sum of the income tax and national insurance for this salary is £4,384.³¹

³¹[HMRC Rates and Allowances](#)

For those starting work with no intervention, we assume they will get the national living wage for over 25s. This is £16,000 for an annual salary³², which results in an average income tax and national insurance payment of £1,481.

Applying these tax payments to the percentage employment rate above, we get the following average annual tax payments:

	Year 1	Year 2	Year 3
Beam employment rate	100%	75%	75%
Beam expected tax	£4,384	£3,288	£3,288
'No intervention' employment rate	20%	33%	42%
'Not intervention' expected tax	£296	£495	£628
Difference in tax paid	£4,088	£2,793	£2,660

Calculating the NPV, we get an average £9,270 in increased income for HMRC per person in work from Beam's intervention.

Local government - council tax

Local authorities gain money through an decreased number of people being exempt from paying council tax due to unemployment

Methodology:

- Calculate the average increase in council tax paid per person in work
- Apply the percentage employment rate as calculated in the DWP savings

We assume that when a person is unemployed, they do not pay any council tax. Although all Local Authorities have different rules based on income levels, it is generally true that someone who is unemployed will receive full Council Tax Reduction (i.e. they will pay no council tax)³³.

When someone is in employment, we assume they pay full council tax. The average council tax annual rate is £1,327³⁴. Therefore the increased council tax payment per employed person is £1,327.

Applying the percentage employment uplift from Beam's intervention that we calculated under the DWP savings, we get the following average increase in council tax:

	Year 1	Year 2	Year 3
Employment uplift	80%	42%	33%
Increased Council Tax	£1,062	£552	£433

This gives an NPV of £1,999 for the increased council tax paid to Local Authorities by each person who starts work through Beam.

³² [National Minimum Wage rates](#)

³³ [Council Tax Reduction](#)

³⁴ [Council Tax Statistics](#)

Local government - housing

Local authorities reduce their spend on temporary accommodation due to (a) people who are homeless moving into permanent housing, and (b) people who are at risk of homelessness avoiding becoming homeless.

This saving only applies to the cohort of people who are experiencing or at risk of homelessness. This applies to all of Beam's service-users to date but we exclude these savings when scaling up savings to cover all hard-to-reach unemployed people.

We calculate based on households in this section, as that is the unit used in temporary accommodation costs and statistics. We assume that each Beam service-user corresponds to one household (whether that is as a single person or as part of a family).

Methodology for those moving out of homelessness:

- Calculate the cost per month to the council for each household in temporary accommodation (TA)
- Calculate the number of months in TA for Beam service-users who move out versus the expected number of months in TA
- Calculate the % of people who start work through Beam who move out of TA

The average cost per month for a household in TA in London is assumed to be £550. This is the average cost shared with Beam by local authorities that Beam has worked with, and can also be triangulated from public sources of information³⁵ to be seen to apply to other local authorities in London. This figure includes the costs of bad debt and landlord incentives. It is an average across single and family households. It does not include the Local Housing Allowance which is paid by DWP and is covered in the above DWP calculation - this is the additional monthly cost to the council. We assume that the households will be accepted as in priority need by the council so that the council pays this money for temporary accommodation.

For Beam service-users who moved from temporary accommodation into permanent housing, the average time was 6.3 months from the launch of their campaign to the time they moved out of TA.

For the comparison, the average length of stay in TA for a household in London is 23 months³⁶.

This means that, for each household leaving TA, they save 5.7 months of cost in the first year ($12 - 6.3 = 5.7$) and 11 months of cost in the year. Applying this to the cost of £550 per month and calculating the Net Present Value, this gives a cost saving of £8,986 for each household that leaves TA due to Beam's intervention.

As we are basing the calculation on the people who start work after Beam's intervention, we must look at how many people who start work and who are living in TA move on from TA. To date, 56% of Beam service-users who start work and who are living in TA move on from TA. Therefore the savings to a Local Authority for each person who starts work is $0.56 \times £8,986 = £4,992$.

³⁵ <https://www.mylondon.news/news/west-london-news/ealing-council-paid-37-million-16370995>

³⁶ [Temporary Accommodation Live Tables, 2018](#)

Methodology for prevention of homelessness

- Calculate the average cost of a household becoming homeless, based on temporary accommodation costs and support costs for the council
- Calculate the % of Beam service-users who successfully prevent homelessness and compare this to the average in London of all those who councils support to prevent homelessness

As we saw above, the average monthly cost of TA for a household in London is £550, and the average stay in TA is 23 months. This gives the average TA cost of a household becoming homeless as £12,650, or an NPV of £12,445 when you account for timing of costs.

In addition to this, there are support and admin costs of £1,205 for the council for the average household entering TA³⁷. We assume for simplicity that all of these costs would be incurred in the first year of homelessness.

Therefore the total NPV of a household becoming homeless is £13,651.

Beam has been tracking prevention of homelessness for 41 service-users, and 100% of them have prevented homelessness to date. The London average for the percentage of people who councils prevent from homelessness is 52%³⁸. Therefore, the percentage increase from Beam is 48%. This means that for each household at risk of homelessness, Beam saves on average £6,552 for the local authority.

Combining the savings for those who are experiencing homelessness and at risk of homelessness, we take the split of Beam's service-users to date which is 52% homeless and 48% at risk of homelessness. Taking a weighted average on these percentages, we calculate an average saving to housing costs for a Local Authority for each person who starts work with Beam is £5,748.

Total cashable savings

Therefore for each person who starts work after Beam's intervention, the cashable savings are as follows:

- DWP: £14,288
- HMRC: £9,270
- Local Authorities: £7,747
- Total: £31,305

As 76% of service-users start work, when we look at the entire cohort of Beam service-users (regardless of outcome) the average saving is £23,791. This assumes that there are no cashable savings for those who start work, when in reality there are still likely to be some advantages from training³⁹.

As the average crowdfunding campaign is £3,210, this creates £7.41 cashable savings for each £1 raised.

This means that the £1 million crowdfunded to date by Beam is expected to result in savings of £7,410,000 to the UK government.

³⁷ [The Cost of Homelessness Services in London](#), LSE (Calculated from table A8)

³⁸ [Government Live Tables on Homelessness](#)

³⁹ See ROI from vocational qualifications in [Investment in Skills, New Economy](#)