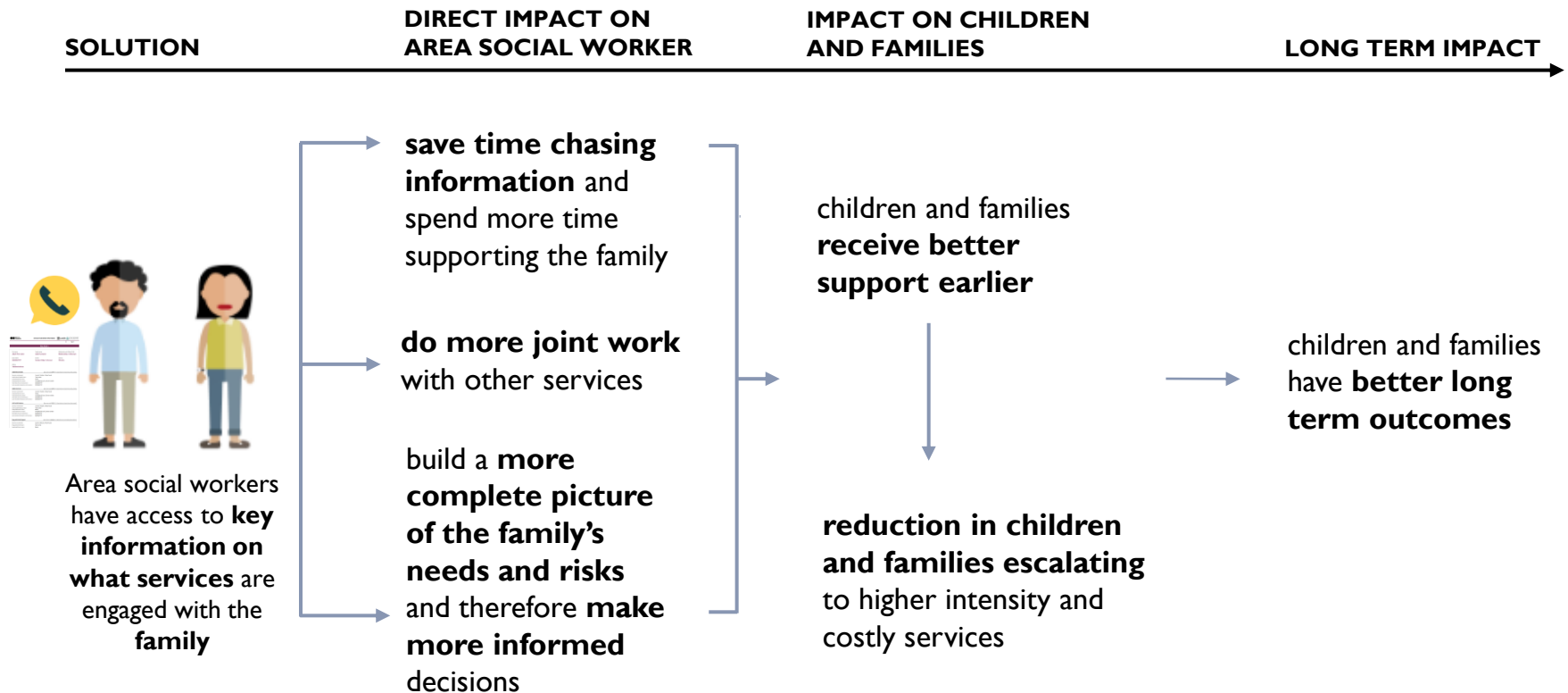# BENEFITS CASE

THE PROBLEM

When social workers first interact with a family, they do not have easy access to **key information** on relevant people in the family and the services that have engaged with them. This results in them either taking decisions without this key information or spending a **significant amount of time searching for it**.
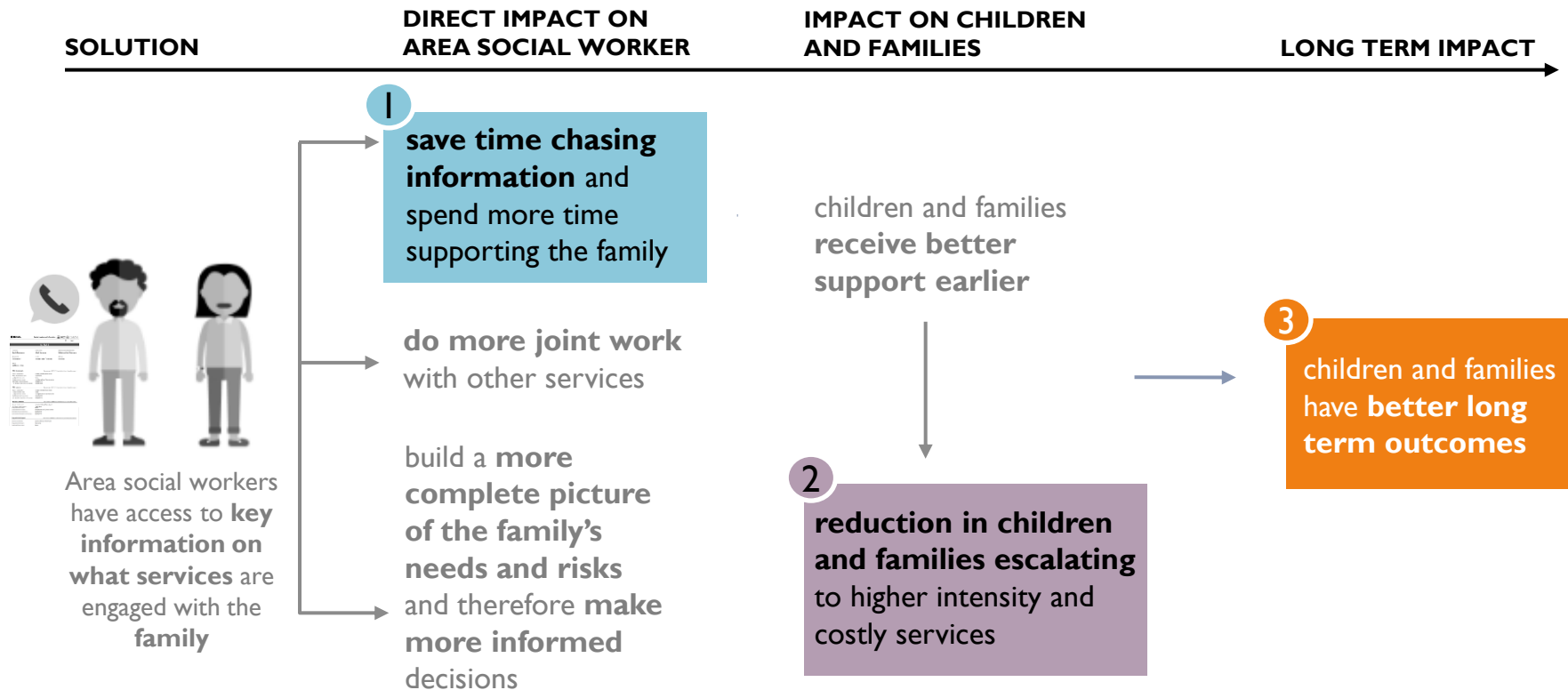
Consequences are:

*Social workers sometimes have **incomplete information** which can change decisions and outcomes for children and families.*

*Social workers **waste time** chasing information. They would prefer to spend this time working out a plan with the family.*

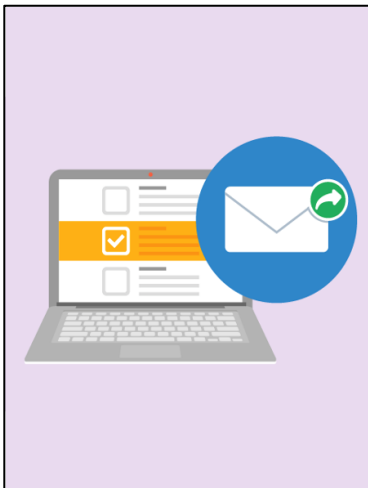# WHAT IS THE POTENTIAL IMPACT OF THE SOLUTION ON THE PROBLEM?

SOLUTION	DIRECT IMPACT ON AREA SOCIAL WORKER	IMPACT ON CHILDREN AND FAMILIES	LONG TERM IMPACT

Area social workers have access to **key information on what services** are engaged with the **family**

save time chasing information and spend more time supporting the family

do more joint work with other services

build a **more complete picture of the family's needs and risks** and therefore **make more informed** decisions

children and families **receive better support earlier**

reduction in children and families escalating to higher intensity and costly services

children and families have **better long term outcomes**

QUANTIFYING THE BENEFITS

| SOLUTION | DIRECT IMPACT ON AREA SOCIAL WORKER | IMPACT ON CHILDREN AND FAMILIES | LONG TERM IMPACT |

1 **save time chasing information** and spend more time supporting the family

children and families **receive better support earlier**

3 children and families have **better long term outcomes**

do more joint work with other services

Area social workers have access to **key information on what services** are engaged with the **family**

build a **more complete picture of the family's needs and risks** and therefore **make more informed** decisions

2 **reduction in children and families escalating** to higher intensity and costly services

DURING ALPHA PHASE, WE IDENTIFIED AND PRIORITISED THREE BENEFITS FROM FAMILY CONTEXT:
(1) SOCIAL WORKERS SAVE TIME CHASING INFORMATION FROM SERVICES INCLUDED IN FAMILY CONTEXT TOOL;
(2) REDUCTION IN CHILDREN AND FAMILIES ESCALATING INTO MORE INTENSIVE SERVICES; AND
(3) CHILDREN AND FAMILIES HAVE BETTER LONG-TERM OUTCOMES.
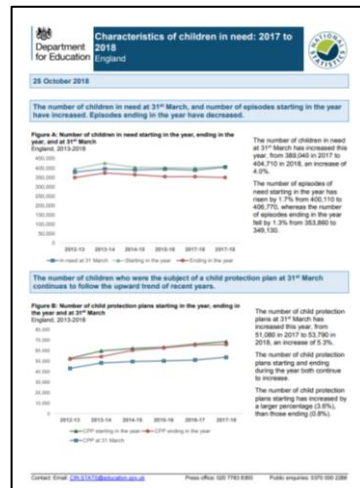
KEY INGREDIENTS OF THE BUSINESS CASE

To build the business case, we combined insight from research with Social Workers in Leeds and Stockport with national data, sector research and guidance from Her Majesty's Treasury to develop a benefits case for the average local authority

Direct input from Social Workers	*National Data*	*Sector Research*	*HMT Guidelines on Benefits Cases*
We updated the alpha estimates collected during 'live prototyping' with service specific ones provided by Social Workers in Leeds and Stockport through an online survey to estimate the impact of Family Context.	We used national data to create a benefits case for the average local authority.	We used sector research to test and challenge our assumptions on the benefits of Family Context.	We applied confidence factors to each of our benefit assumptions to take into consideration optimism bias. These confidence factors have been calculated in line with Green Book / GDS guidance.

TIME SPENT CHASING INFORMATION (1/2)

Problem: Social workers spend a lot of time searching for key information on families and the services engaged with them. We have asked Social Workers the average time per assessment they spend researching other services to find out and discuss past (or current) involvement with the family, and the respective proportion spent on School, Adult Social Care, Housing and Police information. Social Workers said it would usually take c. 2.1 hours to chase information for each assessment across these four services.

Solution impact: We believe that by presenting information on the services involved with the family, social workers can spend less time chasing that information and more time with children and families.

Benefits: Based on alpha user research, and validation with local teams during private beta, we estimate a saving of 80% with the prototype tool. This would save area social workers in a single local authority over 7,000 hours per year.* Instead of chasing information, this time could be spent working with children and families.

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* A 69% confidence factor is applied to this figure when estimating cost benefit, calculated in line with Green Book / GDS guidance.

▶ ONCE THE TOOL HAS LAUNCHED IN STOCKPORT AND LEEDS, WE WILL BE ABLE TO FURTHER VALIDATE HOW AREA SOCIAL WORKERS USE FAMILY CONTEXT AND THE TIME SAVING FIGURES ASSOCIATED WITH HAVING SCHOOL, ADULT SOCIAL CARE, HOUSING AND POLICE INFORMATION AVAILABLE IN THE TOOL.

TIME SPENT CHASING INFORMATION (2/2)

Calculation per local authority:

2.1
Average nr of hours spent researching **ASC, School, Police and Housing** per assessment **without the Family Context tool**

X

80%
Percentage of time saved through using **the Family Context tool**

=

1.7
Average number of hours saved researching per case **using the Family Context tool**

X

4,313
Average number of **assessments per year**

=

7,296 hrs / 5,016 hrs
Without confidence factor applied   With confidence factor applied

Extra time that could be spent supporting children and their families. 5,016 hours are equivalent to 3 social workers or c. £109k per annum.

Assumptions & Sources: We surveyed social workers and asked them how long they spend chasing specific School, ASC, Housing and Police information and the potential time savings from using the tool. We used the DfE's 'Character of Children In Need Report' to determine the average number of assessments per year. We used Green Book / GDS guidance to calculate a 69% confidence factor to take into consideration the level of confidence in the data and assumptions included within the calculation. Please note that the numbers have been rounded.

2 REDUCTION IN CHILDREN AND FAMILIES ESCALATING (1/2)

Problem: A significant number of children each year are assessed by Children's Social Care and don't initially receive support, but subsequently escalate to higher levels of need. For example, 23,000 children a year are assessed by Children's Services to require no action, but are re-referred within a year and do need social work support (Action for Children: 'The Revolving Door'). This means that children don't access early support and often end up needing more costly and intensive support later on.

Solution impact: We believe that by presenting information on services involved with the family, so that social workers have timely information and are able to engage partner services sooner, these children are far more likely to receive the support they need as early as possible. A lack of information to support service coordination is one of the key reasons that the need for support is not identified sooner.

Benefits: We conservatively estimate that Family Context will be able to reduce escalation to higher levels of need for just 20% of these cases. This will mean that 30 more children per year in a local authority would get the right support at the right time. If these children are able to access a lower level of support due to earlier identification of their needs, local authorities would have an additional c. £255k* p.a. to invest in services for children and their families.

* This figure incorporates a 69% confidence factor, calculated in line with Green Book / GDS guidance.

▶ ONCE THE TOOL HAS LAUNCHED IN STOCKPORT AND LEEDS, WE WILL BE ABLE TO FURTHER VALIDATE HOW AREA SOCIAL WORKERS USE FAMILY CONTEXT AND THE PROJECTED IMPACT ON REDUCING ESCALATION.

② REDUCTION IN CHILDREN AND FAMILIES ESCALATING (2/2)

Calculation per local authority:

151 × 20% =

151	Average number of children per council each year that are referred to Children's Social Care, have no action taken, but are re-referred within a year and need social work support[1]
20%	The proportion of these cases that we estimate could be improved with a fuller view of the family[2]

c. 30

Number of children who get the right support at the right time

×

c. £12k

Estimated cost reduction associated with supporting a child with less intensive services due to intervening earlier[3]

=

c. £371k
Without confidence factor applied

c. £255k
With confidence factor applied[4]

Potential benefit per year from supporting children earlier

Assumptions & Sources:
1. 23,000 children a year are assessed by Children's Social Care to require no further action, but are re-referred within a year and do need social work support – Action for Children: 'The Revolving Door' – Are we failing children at risk of abuse or neglect? Note: this proxy for "false negative" assessments is a conservative estimate as it only captures one type of "false negative". However, this is potentially balanced by the fact that some cases will have been correct assessments where the child's needs have escalated significantly over the last year.
2. We assume that one in five of these cases could be improved with a fuller picture of the family. The tool will provide Social Workers more information on School, ASC, Police and Housing involvement and by doing so help reduce by 20% the number of cases that are re-referred to Children's Social Care. We have tested the assumption with Directors of Children's Social Care.
3. Of the cases starting in a year, 76% are for Child in Need (CiN) not receiving a CPP, 16% are for Child Protection Plan (CPP) and 8% are for Looked After Child (DfE: Characteristics of children in Need and Care). The average direct cost of supporting a Looked After Child is £44,647 (DfE Aldaba), and c. £10,776 for CiN/CPP (DfE Aldaba) and £2,601 (estimated) for Early Help. We estimated the time children spend CiN, CPP, and LAC from the 'Characteristics of children in Need and Care' report.
4. A confidence factor of 69% was calculated in line with Green Book / GDS guidance.

3 CHILDREN AND FAMILIES HAVE BETTER LONG TERM OUTCOMES (1/2)

We believe that Family Context will positively impact children, helping them reach their potential and avoid the negative life outcomes that many children who have been in care experience. We've identified different areas of impact which we've quantified below.

Area[1]	% of Care Leavers that experience outcome	% of non-Looked After Children that experience outcome	Cost of outcome per year	Additional cost of outcome due to Care Leavers	Confidence factor	Organisation bearing costs
Criminal justice[2]	**5.6%** *of care leavers are in custody at any point*	**0.13%** *of the population are in custody at any point*	**£34,840** *Annual cost per offender in prison*	**£754m**	**63%**	**MoJ**
Employment Welfare benefits[3]	**11%** *Estimated care leaver unemployment rate*	**4%** *Unemployment rate for the general population*	**£3,063** *52 weeks of Job Seeker's Allowance*	**£81m**	**69%**	**DWP**
Employment Foregone tax[4]	**68%** *Estimated employment rate for care leavers*	**75%** *Employment rate for the general population*	**£3,020** *Annual tax on average UK salary*	**£80m**	**69%**	**DWP**
Health[5]	**46%** *of care leavers with mental health needs*	**13%** *of children with mental health needs*	**£2,338** *England average community expenditure per referral*	**£307m**	**63%**	**DHSC**
Homelessness Homeless services[6]	**2%** *of care leavers homeless at any point*	**0.5%** *of the population homeless at any point*	**£14,808** *Estimated average cost of homeless services per person over one year*	**£88m**	**69%**	**MHCLG**
Homelessness NHS, mental health, drug & alcohol[6]	**2%** *of care leavers homeless at any point*	**0.5%** *of the population homeless at any point*	**£7,717** *Estimated average cost of NHS / mental health / drug & alcohol over one year*	**£46m**	**69%**	**DHSC**

1. All numbers here are rounded. Calculations are based on non-rounded figures, with any small differences in calculated figures due to this. A detailed breakdown of the calculations can be found in the supporting business case model.
2. 30% of YP in custody are CLs (Report by HM Inspectorate of Prisons); there are currently 83,000 prisoners in the UK (MoJ) with an adult population of 52,4M (ONS); cost per prisoner including overhead is based on NEF unit cost database.
3. NEETs data was used to estimate CL unemployment rate: CL are 3x more likely to be NEET vs their peers (Support for Care Leavers, Briefing Paper 08429, House of Commons Library), we therefore estimate a correspondingly higher unemployment rate for CL.
4. CL employment rate was estimated using the difference between general employment rate of 75% (ONS) and estimated LAC employment rate of 68%. LAC employment rate based on LAC unemployment rate of 11% and conservatively assuming that the same proportion of LAC as of the general population are out of the labour force (21%). Average UK salary in 2015 was 27,600 (ONS), giving £3,020 per person at a 20% tax rate on salary above personal allowance.
5. Based on relative proportions of CL vs. non-CL having MH needs, and the average community expenditure per referral (source: NHSE).
6. Based on relative proportions of CL vs. non-CL experiencing homelessness, and the estimated average cost of homelessness in relation to direct services and associated NHS, mental health, drug & alcohol costs (Source: Crisis, Better Than Cure report, 2016). The percentage of care leavers homeless at any point only includes those cases known to the council, so we expect this could be an underestimate of the true figures.

③ CHILDREN AND FAMILIES HAVE BETTER LONG TERM OUTCOMES (2/2)

Calculation per local authority:

Cost of negative outcome
per year

X

$$\left[\begin{array}{c} \text{Proportion of Care Leavers that experience negative outcome} \end{array} - \begin{array}{c} \text{Proportion of Non-Care Leavers with negative outcome} \end{array} \right] =$$

Calculation summed over key areas of impact[2]

£3,423

Additional cost of outcomes due to Care Leavers (per year per Care Leaver)

x

58

Average lifespan after age 18

x

c. 2

Cases each year that Family Context would prevent escalating to LAC[3]

=

Projected lifetime benefit for individuals whose outcomes are improved by FC each year:

c. £460k
Without confidence factor and discount rate applied

c. £140k
With confidence factor and annual discount rate applied[4]

Assumptions & Sources:
1. All numbers here are rounded. Calculations are based on non-rounded figures, with any small differences in calculated figures due to this. Detailed calculations can be found in the supporting model.
2. Areas of impact include: Criminal Justice, Welfare benefit, Foregone tax, Mental health support, Homelessness support (both direct and associated NHS, mental health, drug & alcohol costs).
3. Figure extracted from calculation in section 2 on reduction in children and families escalating due to Family Context, including only the proportion of these cases that would not escalate to LAC as a result, and therefore would not become care leavers.
4. Confidence factors were applied to each of the areas of impact based on the source data for the inputs. The factors were derived in line with Green Book / GDS guidance, and range from 60-70%. An annual discount factor of 3% p.a. was also applied.

WHAT ARE THE TOTAL COSTS OF FAMILY CONTEXT?

Development Costs	*One-off setup costs*	*Ongoing per annum*
£315k Discovery & Alpha	**£112k** Setup Costs (per LA post-beta)	**£25k** p.a Ongoing Product Management and Maintenance (per LA)
£604k Private Beta	**£30k** Unlocking Access to Data (per LA post-beta)	**£7.5k** p.a. Ongoing Central Support (per LA)
£54k Beta Roll Out		
£264k Product Development to Integrate Additional Datasets		

£1,238k **Total Development Costs**	**£142k** **One-off Setup Costs**	**£32k** p.a. **Maintaining Family Context**

These costs reflect the total resource required for a local authority to implement Family Context: Only a small proportion of these are 'cash' costs. For example, for a local authority post-beta, the £142k setup cost is entirely staff resource, with the potential that local authorities could allocate in-house resource, or may want light-touch external support, for example to support technical build or to benefit from additional expertise from precedent authorities. Of the £32k p.a. ongoing cost, £10k of this relates to central support and hosting costs, with the remainder representing staff resource. Slides 16-18 provide further detail on each of these costs.
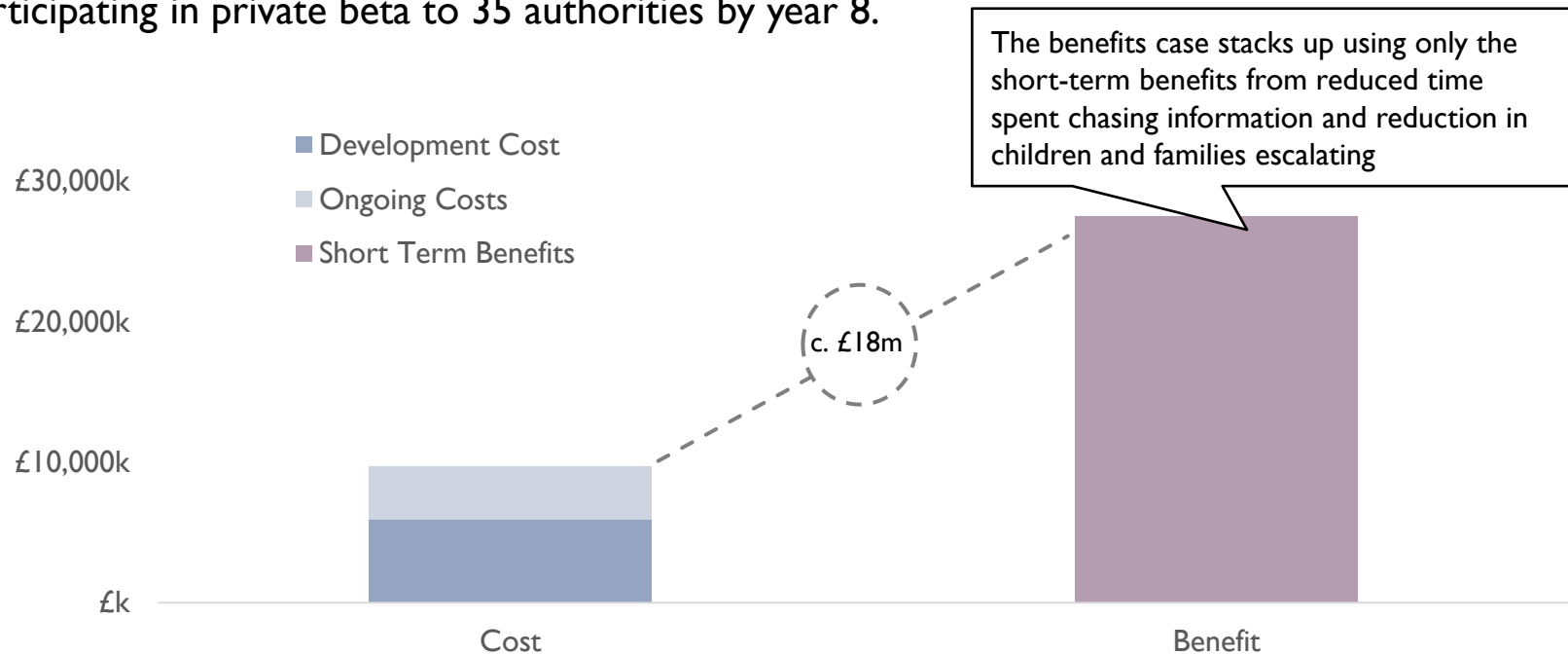
WHAT ARE THE COSTS AND BENEFITS OF FAMILY CONTEXT?

The costs and benefits are based on the long-term vision for Family Context.

Costs | Benefits

Development Costs (one-offs shared across discovery, alpha, beta and product development partners)	*One-off setup Costs* (per LA post-beta)	*Ongoing per annum* (per LA)	*Time spent chasing information* (per LA)	*Reduction in children and families escalating* (per LA)	*Children and families have better long term outcomes* (per LA)
£1,238k	**£142k**	**£32k** p.a.	**5,016** hours p.a.	**£255k** p.a	**£140k**
Total Development Costs	One-off Setup costs	Maintaining Family Context	Extra time that could be spent supporting children and their families – equivalent to 3 social workers or c. 109k per annum	Potential benefit per year from supporting children earlier	Projected long-term benefit for children & families who do not escalate to LAC and CL due to Family Context each year (discounted at 3% p.a.)

DOES THE BENEFITS CASE STACK-UP?

To understand the cost and benefits of Family Context, we analysed the difference between costs and benefits over an eight-year time horizon, projecting a ramp up from the two local authorities participating in private beta to 35 authorities by year 8.

The benefits case stacks up using only the short-term benefits from reduced time spent chasing information and reduction in children and families escalating

Legend:
- Development Cost
- Ongoing Costs
- Short Term Benefits

Chart axis: £30,000k, £20,000k, £10,000k, £k

c. £18m

Cost | Benefit

In addition, we conservatively estimate long-term benefits of at least £11m over the 8-year period

Note: To ensure a conservative projection of cost-benefit, the model assumes a ramp-up in benefits realisation of 20% p.a., in addition to a 12-month offset in benefits realisation. All benefits figures are multiplied by an appropriate confidence factor, and the long-term benefits figure also factors in a discount rate of 3% p.a. We also note that the 'costs' include total resource allocation for a local authority to implement Family Context, and we anticipate a significant proportion of this would relate to allocation of time from in-house roles. Further detail can be found in the accompanying business case model.

EXPLANATION OF KEY COSTS

WHAT ARE THE _DEVELOPMENT COSTS_ OF FAMILY CONTEXT?

£315k
Discovery & Alpha

Assumptions: Between September 2018 and August 2019, Leeds, Stockport, MHCLG and Social Finance ran a discovery and alpha to better understand what data and insight is needed on the family to improve outcomes for children. This figure incorporates actual costs incurred across discovery (£100k), alpha (£170k) and alpha extension (£45k) phases.

£604k
Private Beta

Assumptions: The total cost for private beta includes actual costs to 31st March 2020 (£439k), alongside projected costs to complete private beta (£165k), launching the tool in one locality in each of Leeds and Stockport. This incorporates resourcing from local authority data and digital teams, information governance, project management and social worker / service lead input, alongside 7 weeks of digital agency support, and central support for core product development and creation of open source materials to support wider implementation.

£54k
Beta Roll Out

Assumptions: The projected costs for beta roll out reflect the resourcing required to roll out across all localities in Leeds and Stockport following completion of private beta. This incorporates fixed costs to produce guidance materials for dissemination across teams; variable costs to cover training and oversight of the roll out; and a small central budget to support user research with additional locality teams to ensure ongoing product development is representative of the wider group of social workers, beyond those engaged during private beta.

£264k
Product Development to Integrate Additional Datasets

Assumptions: We have included projected costs for integrating additional datasets needed to provide information on the family and the services engaged. Costs includes central support to engage with data owners and understand potential data fields; user research and prototyping with social workers to develop a common data model; and documenting justifications for data sharing. Alongside this, we have incorporated resourcing assumptions for 2 'lead' LAs to integrate these datasets as a precedent approach, which will be used to share learnings with subsequent LAs. This includes LA information governance leads, solution architect / data analyst input and project management. We have modelled the addition of 6 additional datasets in total, spanning areas such as Adult's Drug and Alcohol Support, Adult's Mental Health and Early Help.

Note: Whilst the alpha business case incorporated a specific component for the development of a Family Context matching algorithm, for both beta LAs, the matching component has built on existing local matching capability. There has therefore not yet been central work to define a matching algorithm, and this has instead entailed some additional local work included within the overall beta costings.

WHAT ARE THE *SET-UP COSTS* OF FAMILY CONTEXT?

£112k
Setup Costs
(per LA post-beta)

Assumptions: This setup cost reflects the investment required for each additional local authority joining post-beta. The assumptions are based on learning from the experience of development with Leeds and Stockport during private beta, incorporating an efficiency gain to reflect the fact that subsequent local authorities are able to build from the reference implementation and open source guidance documents produced during the beta phase.

£30k
Unlocking Access to Data
(per LA post-beta)

Assumptions: This cost reflects the local resource required to access additional datasets needed to provide information on the family and the services engaged. For each dataset and data source, we have estimated the number of days required from LA information governance leads, solution architect / data analyst input and project management. As this builds from the core product development work carried out with 'lead' Councils for each additional dataset, these costs factor in an estimated efficiency gain. In total, we have modelled the addition of 6 additional datasets, spanning areas such as Adult's Drug and Alcohol Support, Adult's Mental Health and Early Help.

FOLLOWING THE LAUNCH OF THE TOOL IN BETA LOCAL AUTHORITIES, WE WILL CONTINUE TO TEST AND REFINE OUR ASSUMPTIONS ON THE COST OF SCALING FAMILY CONTEXT

WHAT ARE THE _ONGOING_ COSTS OF FAMILY CONTEXT?

£25k p.a
Ongoing Product Management and Maintenance (per LA)

Assumptions: The ongoing running costs include training for new staff, hosting, additional developer time to incorporate changes to Family Context based on learnings, as well as information governance and project sponsor time to ensure continued access to key datasets and engagement from relevant services.

£7.5k p.a.
Ongoing Central Support (per LA)

Assumptions: Each local authority benefits from collaboration on Family Context including common data schema, data processing agreements, design principles, UI/UX etc. We have therefore assumed that each local authority would contribute a small amount of the savings to support continued collaboration and coordination of Family Context. This assumption will be refined as the central support model is further defined.

▶ FOLLOWING THE LAUNCH OF THE TOOL IN BETA LOCAL AUTHORITIES, WE WILL CONTINUE TO TEST AND REFINE OUR ASSUMPTIONS ON THE COST OF SCALING FAMILY CONTEXT