

Cost reporting guidance

Our approach to reporting the cost of delivering interventions

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# Summary principals

Who's this guidance for?	YEF evaluators collect and report cost information on the projects we fund. This does not apply to projects at the feasibility stage or funded through our Launch Grant Round.
	Estimates are of the costs of delivery only.
	Cost estimates should be derived using a 'bottom-up' approach.
General principals	Cost estimates should be from the perspective of all organisations involved in delivering the intervention.
	Estimates should capture the nature of resources used, the quantity and monetary value in delivering the intervention.
What costs to	The main cost categories include: staff; programme procurement; buildings and facilities; materials; and, incentives for taking part.
include	Costs relating to the evaluation and programme development should be excluded.
	Wage estimates should be sourced locally from the project. Where this would be disclosive, sector wide estimates should be used.
Calculating labour costs	Staff costs should include non-wage labour costs, reflecting only items varying directly with hours worked (e.g. employer NICs).
	Volunteer time should not be treated as a cost to the project, unless it would be reasonable to expect others to have to pay financially.
Accounting for	All costs should be adjusted to constant prices using GDP deflators.  The base year used should be the year in which delivery begins.
the timing of spending	Estimates should not be discounted to account for social time preference.
Treating	Where durable inputs have benefits to those outside the project, assumptions should be made to prorate costs in line with the proportion of the project participants that benefit.
durables inputs	For durable inputs that have a residual value once the project has finished, no adjustments should be made to account for this.
Non- attendance	Cost estimates should be generated assuming full compliance (i.e. recruited participants attend all sessions).
	Costs should be separated into prerequisite, set-up and recurring.
Reporting	Where the type of support varies across participants, cost estimates should be reported separately only where outcomes are also evaluated for subgroups.
results	Total costs should be presented for one round of delivery for an average group or cohort receiving the intervention.
	Average cost per participant figures should be presented for set-up, recurring and total costs separately.

## **About this guidance**

#### **About the Youth Endowment Fund**

The Youth Endowment Fund (YEF) is an independent charity with a mission that matters. We're here to prevent children and young people becoming involved in violence. We do this by finding out what works and building a movement to put this knowledge into practice. In building and sharing knowledge about what works, we'll help people in power make better decisions based on evidence.

#### Why report cost information?

For decision makers to make informed choices, they need to know what works and what's involved in implementing it. Only by knowing how effective an intervention is and how much it'll cost to implement, can they make informed decisions about how to allocate scarce resources. Estimates of cost need to be produced in the same way, so different interventions can be compared on a like-for-like basis. And, estimates will vary depending on whose perspective they're calculated from. This guidance explains what cost data should be collected and reported on our projects.

#### Who does this guidance apply to?

This guidance is for the evaluators of YEF funded projects. It is their responsibility to collect and report cost information and is set out in our evaluator agreements. The cost information will be summarised and published in our evaluation reports.

This guidance only applies to pilot and efficacy/effectiveness studies. For projects funded at the feasibility stage, we expect evaluators to summarise information such as the amount of staff time and other resources required to run the intervention. But they do not need to produce full cost estimates.

If the answer is yes to all the questions below, then this guidance applies to you. Reference should be made to this guidance when evaluators are submitting evaluation plans to the YEF.

Our grantees and other partners may also find this guidance helpful to understand our approach. For evaluators of feasibility studies this guidance may still be of interest as there is the potential for projects initially evaluated at the feasibility stage to progress to pilot or efficacy evaluation.

## Does this guidance apply to me?

Questions	
Are you a YEF evaluator?	Yes / No
Are you working on a project commissioned from 2021 or later?	Yes / No
Are you involved in a pilot or efficacy/effectiveness study?	Yes / No

## **General principals**

#### What is cost estimation?

Evaluators are to estimate the costs of delivery only.

Cost estimation is about placing a monetary value on all the resources used in the delivery of an activity. Cost estimation is a valuable evaluation tool used to understand the resources needed to deliver an intervention and to compare the cost of different services.

Cost estimation is an important first step in understanding whether an intervention offers value for money. Cost estimates can be compared with the outcomes observed to assess the relative effect different types of investment have. Approaches for doing this include:

- Cost consequence analysis (CCA) simply presents a range of costs associated with a range of different outcomes allowing those paying for a service to decide what outcomes they are interested in achieving.
- Cost effectiveness analysis (CEA) compares the relative costs between different interventions with standardised improvements in outcomes achieved. For example, the costs different programmes incur per violent offence avoided.
- Internal rate of return (IRR) compares how long it takes for interventions to breakeven. For example, how many years before the costs of an intervention are offset by the savings to police due to reductions in crime.
- Cost benefit-analysis (CBA) involves calculating the total economic value of the benefits delivered by an intervention, with the full economic cost of delivery. For example, whether the financial and social value of the benefits of preventing crime offset the financial and social costs of the intervention.

All these approaches have valuable contributions to the question of which programmes offer the best value for money. However, the YEF will not fund evaluators to undertake complex analysis comparing the costs of the intervention with the effects observed; we are interested only in the costs of actually delivering the programme.

#### Bottom-up or top-down estimates?

Estimates should be derived using the 'bottom-up' principal.

There are two broad approaches to producing cost estimates, top-down (or gross-cost) or bottom-up (or micro-cost).

- Top-down estimates start with the total amounts funded to a provider or programme
  and then those figures are apportioned to the relevant level (i.e. to the amount
  spent on individuals or particular areas of activity). These are often estimated
  retrospectively, by looking at things like figures in accounts or the total amount of
  funding provided to delivery organisations and then apportioning them to different
  types of activity.
- Bottom-up estimates start by identifying the individual resources required to deliver an intervention, estimating the quantity of these resources needed and attaching monetary values to these resources. These are combined to estimate the total amount spent on an intervention. For example, when working out the amount of staff time spent on something, bottom-up estimates start with the total number of hours spent delivering a course of a programme and then applying assumptions for the relevant wage rate for the members of staff involved.

Bottom-up cost estimates are often more resource intensive to generate but more valid and reliable than top-down cost estimates. A critical aspect of cost estimation is transparency. Sufficient information needs to be made available to enable commissioners to see how estimates have been derived and if necessary adjust estimates to suit their own circumstances.

For YEF evaluations we expect evaluators to use the bottom-up principal. That is, to articulate the individual inputs that go into providing an intervention and then estimating specific costs for those elements.

#### From who's perspective should costs be estimated?

Costs should be estimated from the perspective of the organisations delivering the intervention.

One of the most crucial decisions in any cost analysis is from whose perspective costs are estimated. The costs to those receiving an intervention are typically quite small and relate to things like the cost of accessing the intervention (e.g. transport) or the opportunity costs of attending (i.e. what else they could have been doing with their time). Whereas, for those running or commissioning a programme, they could face several different costs, such as buying or licencing materials, training and paying staff to deliver the programme, and hiring accommodation.

#### Whose perspective: where costs fall

Perspective	Type of costs
Children and their families	Travel costs; opportunity cost of time attending sessions.
Providers (i.e. schools)	Training costs; licencing/materials; facilities.
Government/Society	Total net costs societal costs of all resources used in the delivery of the programme.

In YEF evaluations we are concerned with the financial costs incurred by the organisation or organisations involved in the delivery of the programme. This is so that when other providers and commissioners come to implement the activity in the future, they understand what's involved. We are less concerned about monetising wider costs that fall outside the programme providers (e.g. on families in taking part), although it's important evaluators capture information on the expectations placed on wider actors like families.

We fund a range of different projects involving different types of organisations, including:

- **Commissioners** (such as police forces, youth offending teams or local authorities), who may be looking to buy-in or develop an intervention in their area;
- Programme developers, who may be looking to recruit settings to deliver their programmes in, and;
- **Settings and providers** (such as schools, hospitals or police stations) where the activity is ultimately delivered.

Projects may include one or multiples of these organisations. The first task of evaluators is to define the role of each organisation in the delivery of the programme and then assess what costs are incurred for them individually and combined.

#### Comparing approaches with the cost of business as usual

Estimates should capture all the resources used in delivering the intervention but not how costs change compared to business as usual.

Due to the many settings and context in which our projects are delivered, what would have happened to the children in our projects (i.e. either in the control group or counterfactual scenario of no intervention), will vary greatly. Sometimes the services we fund will be the only extra support children receive. In other scenarios it will be an additional layer of support, on top of existing provision. In others, we will be directly comparing alternative approaches for reducing the risk factors linked to crime and violence.

It's often common practice for costing work to assess how costs change for the organisations delivering the intervention compared to business as usual. Often termed the marginal costs, how much more (or less) does the intervention cost compared with the costs of the status quo. For example, the approach adopted by the Education Endowment Foundation (EEF) for cost analysis of classroom-based interventions regards most of the staff-time spent delivering interventions as effectively free of charge. That is, teachers would have been employed by the school anyway, and the delivery of alternative teaching models often won't increase the number of hours teachers spend teaching, nor the associated salary costs to the school.

As YEF is delivering in many different contexts, it's not appropriate for evaluators to calculate how costs differ for each project compared to what happens in the business as usual control group. Evaluators should produce bottom-up cost estimates for the intervention being evaluated, assuming all resources used are an additional financial burden. In contrast to the EEF example above, we would not expect evaluators to calculate the total value of the time spent delivering classroom-based interventions as being free of charge, they should be estimated by combining assumptions for the number of hours of provision and the salaries of those involved.

This approach ensures consistent capturing of cost information across all our projects. For commissioners, it also ensures they do not underestimate the burden delivery places on all the organisations involved. For providers themselves, such as schools or youth services, cost information will be presented in a sufficiently disaggregated form (see <a href="https://doi.org/10.1001/journal.org/10.1001/jour

<sup>1.</sup> They may of course incur training and preparation costs in-terms of additional hours that would need to be accounted for.

## **Methodological considerations**

#### What costs to include

Cost items included will vary from project to project. The broad categories include: staff-costs; programme procurement costs; buildings and facilities; materials and equipment; and, incentives for taking part. Costs relating to delivery of the evaluation and programme development should not be included.

#### Types of activity

The individual items to include in the cost estimates should be determined based on the intervention's logic model. What level individual items should be costed at (i.e. how disaggregated) is at the discretion of the evaluator. Where possible they should be at a level whereby commissioners can identify how total cost estimates have been derived and the key assumptions underlying the estimates. The more granular the items the greater the precision in the estimates. However, this needs to be balanced with the data that's available and the proportionality of capturing highly refined estimates. It's particularly important to focus on items likely to have the largest impact on the overall estimates.

The broad categories that are likely to be required in most evaluations are summarised in the table on the following page. Some activities will occur only during the set-up of the intervention. Others will be incurred every time it is delivered. Later in the guidance we set out how estimates should be separated between set-up and recurring costs.

## Table: Cost estimate categories

Category	Description	
Staff and labour costs	This includes all wage, salaries and other employment costs (see detail on non-wage labour costs below) for all those involved in the delivery of the intervention, disaggregated by the relevant profession and grades of those involved in the delivery of specific elements. In addition, in areas where a geographical weighting is paid in addition to salary this weighting should be included but highlighted in the cost estimate.	
	Care should be taken in splitting out time and resources involved in training and preparation for delivery of the programme and the on-going running costs. Where the administration costs of the intervention are non-negligible, staff time spent on this should also be included.	
	In some contexts, staff will need to attend training sessions away from their usual duties. This may mean having to appoint cover staff – incurring the cost of the staff themselves and time spend appointing them. Where cover staff are used, the cost associated with the actual cover should be included, not the time spent by the staff themselves on training. This is to avoid double counting. Any subsistence, travel or accommodation costs involved in attending training would need to be captured.	
	In addition to salary and non-wage labour costs, there may be staff costs not directly associated with deliver, for example travel and subsistence costs reimbursed for staff required to travel to locations where the intervention is being delivered or where any training is taking place. These should may be reflected in either the set-up or deliver phases of the intervention.	
Programme procurement costs	Some interventions will require paying fees to access training and materials necessary to deliver the programme. This will be in the case of existing manualised programmes where developers charge access to the resources they've created. These may be one-off and only incurred the first time the intervention is implemented or they may be reincurred every time it's delivered. Cost estimates should be the actual cost charged by the developer rather than any reduced, or subsidised, fees payable because of the evaluation.	
	Some programmes, particularly those in a more developmental stage, may not know how much they will charge. In such cases, evaluators should work with the developer to estimate what these costs could be in the future. The evaluator should work to understand what the potential fees could be, on the assumption they're based on a cost recovery basis only. This should exclude any development costs unless the developer expects to recoup any prior investment by charging for access to the materials. All materials produced as the result of YEF funding will be subject to Crown Copywrite and will be made freely available to others wanting to access them in the future.	

## Table: Cost estimate categories (continued)

Category	Description
Buildings and facilities	In many cases these costs will be nil. This is particularly true where programmes are being run alongside existing delivery, such as in schools, police stations, or in healthcare settings, where access to buildings comes at no additional cost. In some cases, buildings or facilities (such as sports venues) will need to be rented, and these costs should be accounted for. This may also include adaptation to existing facilities.
	Evaluators should apply discretion when use of venues has been donated. If there is a reasonable expectation others replicating the intervention would need to pay for a site, then an estimate based on comparable local market rates should be included. Similarly, if use of facilities displaces paid activity benefitting one of the organisations involved in the delivery of the programme this loss of income is a cost and should also be captured.
Materials and equipment	These cover a wide range of potential items. Mostly these will be relatively low value items (e.g. printing, books etc.). However, some programmes will require more expensive equipment such as phones, tables, laptops etc. As set out below, in what not to include these should only be included where such items are needed for programme delivery, not for delivery of the evaluation.  Durable inputs (i.e. those that provide a benefit once the programme has finished), need to be treated carefully (see guidance on durable inputs below).
Incentives for taking part	This could include things like in-kind gifts (e.g. shopping or cinema tickets) or cash inducements to participants for successful completion and participation in the programme.  This could also include payments to providers. For example, if schools are recruited to host an intervention where YEF is funding the provider directly, cash payments may be required to cover any notional administrative costs associated with the school's participation.  Again, these should only be included where they relate to incentives for taking part in the programme, not the evaluation (see what not to include).
Other inputs	The above inputs are not exhaustive, and it will be the role of the evaluator to identify and categorise all other potential inputs.

#### What not to include

There are two broad cost categories that should not be included:

- Evaluation: The independent evaluator appointed by YEF will not be involved with the delivery of the intervention, so their costs are strictly out-of-scope from inclusion in the cost analysis. In addition, delivery organisations themselves may provide some support to the evaluation, such as filling in surveys or monitoring information on the programme participants or supporting the wider administration of the evaluation, such as sharing data. All this activity will also be out-of-scope of the cost estimate. It's also important to only include incentives associated with taking part in the intervention and not to include incentives associated with taking part in the evaluation. In some cases, monitoring participants (via questioners or surveys) may be part of the delivery model. Where these are standard activities expected every time the programme is delivered, then these costs should be included.
- Programme development and adaptation: In some contexts, the YEF will fund development work for an existing programme or adaptation of materials (such as when materials have originally been developed in another country and it is being evaluated for the first time in the UK). In general, development and adaption costs should not be included in the cost estimate. However, judgement is required. If it is expected that some adaptation of materials is required every time the programme is delivered in a new setting, then this should be included as a set-up cost.

#### How to calculate labour costs

Wage estimates will ideally be sourced from the projects locally. Where doing so would be disclosive, sector wide estimates should be used, based on representative roles and qualification levels. Staff costs should include estimates for non-wage labour or 'on-costs' costs. These should relate to the costs of employment that vary directly with hours worked, such as employer National Insurance and pension contributions. Volunteer time should not be treated as a cost to the project, unless it would be reasonable to expect others to have to pay financially.

The largest single item of expenditure is likely to be the cost of people's time. In line with the bottom-up principal, estimates should be derived by applying assumptions for the numbers of hours of staff-time used in each activity involved in the delivery of the programme, with assumptions for wages and wider non-wage labour costs. It's also important to record the role that volunteers play in the delivery of a programme.

#### Wages

Ideally, assumptions for wage and salary costs will be captured directly from the project. We recognise that for some projects working with a small number of staff, it may be disclosive to report salary information. We recommend that where wages and salary information is based on figures for less than five members of staff or where salary information can't be obtained from the project, sector wider assumptions are applied. These should best approximate the qualifications, skills and specialism of those involved in delivering the relevant task within the intervention. Sources for sector level staff cost assumptions include:

- The ONS Annual Survey of Earnings and Hours (ASHE) here. Provides various breakdowns of earnings by sector, age and gender.
- Department for Education School Workforce Statistics <u>here.</u> Provides average salary costs for the school workforce for different bands.
- The unit costs of health and social care database, published by the Personal Social Services Research Unit (PSSRU)<sup>2</sup> - here. Provides annually refreshed salary information for health and social care staff. PSSRU's 2013 estimates of unit costs in the criminal justice system (here) may also provide relevant staff cost assumptions.
- The cost of a cohort of young offenders to the criminal justice system, estimated by the National Audit Office (NAO, 2010) here.

<sup>2.</sup> Note care should be taken to check what's been included in sector wide unit costs figures. For instance, many of the PSSRU figures are generated from a top-down perspective and may include non-staff costs like education/training, management, facilities and other costs not relevant to the context of YEF funded programmes.

The economic and social costs of crime, second edition (Home Office, 2018) – <a href="here">here</a>.
 Provides a range of assumptions on the unit costs of different crimes and their impact on policing and the justice system.

When sector level staff costs are used from reference sources it will be necessary to adjust the unit costs, from the year of publication to the year of programme delivery (see how to account for timing below).

#### Non-wage labour costs

In addition to wages, employing staff incurs other costs for employers. These are sometimes referred to as 'non-wage labour costs' or 'on-costs'. These need to be accounted for when calculating the full cost of employing staff. Non-wage labour costs can be quite narrowly defined as including directly variable costs only, such as employer National Insurance and pension contributions. Or, they can include other wider inputs involved in employing staff, like a share of insurance, building and utilities costs that vary less directly with the number of hours worked.

In YEF evaluations, only directly variable employee costs should be included. Preferably evaluators will source relevant estimates that are most relevant to their project. In the absence of relevant project specific information, sector wide assumptions can be taken from:

- ONS Index of Labour Costs (here). This includes broad sector level estimates which show non-wage labour costs to be around 15% and 18% of total labour costs in the private and public sectors respectively.
- Eurostat Labour Cost Levels (here). These include more detailed sector specific breakdowns for the UK.
- The Unit Costs of Health and Social Care database (<u>here</u>). In addition to salary costs, also includes on-cost information for those working in the health and social care settings.

#### Volunteer time

Strictly speaking volunteer time isn't a financial cost to the delivery organisations and shouldn't be factored into the overall calculation of project cost, unless there is a cost to the service in supervising and managing the volunteers. However, where volunteers are vital to the delivery of the programme, it's important that the amount of time contributed is recorded. This is so others are aware of the expectations around the contributions volunteers make and would be expected to were the programme replicated.

If volunteers are performing a role that it would be reasonable to expect others replicating the programme to pay for, then their contribution should be costed. For example, a skilled practitioner may only be donating their time in the context of the YEF funded trial. Calculations should be derived using the same approach above, where salary estimates are based on assumptions for the relevant skills, experience and sectors in which someone performing the role would be drawn from. If the role is unskilled in nature, it would be appropriate to apply a relatively low wage rate, such as the national living wage rate (here). Judgment is required in deciding whether to calculate the value of volunteer's time and included in the estimate of overall project cost. Any assumptions should be explained.



## How to account for timing

All costs should be adjusted to constant prices using GDP deflators; the base year used should be the year in which delivery begins. Estimates should not be discounted to account for social time preference.

How much a pound's worth today isn't the same as it will be in a year's time, for two reasons:

- Inflation: On average the price of inputs (e.g. salaries, accommodation, resources etc.) increase over time. If prices increased by 2% per year, then £1 today would only buy 98 pence worth of the same items in a years' time and 82 pence worth of the same items in 10 years' time. Similarly, the same amount of money today would have stretched further in the past. Converting prices to account for inflation is referred to as 'constant' price adjustments.
- Time preference: Society prefers to spend money later. This is due to: risk—the future is uncertain and it's possible our willingness to pay for something will change. Why spend now when you may not need to in the future?; wealth over time society tends to get wealthier meaning relative costs fall; and, 'pure time preference' people psychologically prefer to defer having to pay for things. The HMT Green Book recommends a common 3% adjustment or 'discount rate' per year to account for society's preference for deferring spending.<sup>3</sup>

Interventions are often implemented over several years and cost data can come from multiple sources and collected at different points in time. To account for the impact of the timing, we expect evaluators to adjust for inflation but not time preference. The rationale and approach is set out below.

#### Inflation

All costs are to be adjusted in line with a standardised base year using HMT GDP deflators (available <a href="here">here</a>). Whilst there are other inflation measures that could be used, GDP deflators are an economy wide measure and it's a simplifying assumption to apply them to all the different inputs required in a project. Evaluators may choose which base year to use, but the expectation is this will be the year in which project delivery begins. The base-year used in the calculations must be clearly stated in the evaluation report.

 $<sup>3 \</sup> https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government$ 

## Inflation adjustment – Worked examples

#### Example one

A project has provided estimates how much their supplier charged them for printing materials from two years ago. It was £1,500 in 2018/20. How much will it cost to print the same material in 2021/22?

	Price adjustment
GDP Deflator (Index): 2018/19	98
GDP Deflator (Index): 2020/21	104
Change in prices: 2018/19-2021/20	6%
Cost in 2018/19 prices	£1,500
Cost in 2021/20 prices	£1,590

#### Example two

A project ran from 2018/19 to 2021/22. Their accounts show they spent £600,000 on salaries in each year. What did they spend in 2018/19 constant prices?

	GDP Index	Price adjustment*	Salaries unadjusted	Salaries in 2018/19 prices
2018/19	98	0%	£600,000	£600,000
2019/20	100	-2%	£600,000	£587,755
2020/21	102	-4%	£600,000	£575,510

<sup>\*</sup>Note the price adjustment is negative. Because they spent the same amount in 'cash' terms each year, whilst prices rose, 'real' costs fell.

### Time preference

Evaluators should not apply discount rates to their calculation of costs in YEF evaluations, because:

- We are concerned primarily with the financial costs of what's delivered. Discounting is about converting monetary figures to their economic and social value.
- Standard discount rates are useful when looking from a societal perspective at the
  costs of something, but less so when looking at the trade-offs commissioners or
  individual service providers will be making.
- Most of our interventions will be delivered over a relatively short period (i.e. one or two years). Adjustments due to exactly what year costs fall will have only a small impact on the final estimates.



#### How to treat durables

Where durable inputs have benefits to those outside the project, assumptions should be made to prorate costs in line with the proportion of the project participants that benefit. For durable inputs that have a residual value once the project has finished, no adjustments should be made to account for this.

Some programmes may need to purchase durable goods, such as tablets or computers. These may have benefits outside the implementation of the programme and beyond its life.

#### Benefits outside the programme

Where the equipment or facilities purchased benefit others, assumptions should be made about the proportion of the project participants who benefit. For example, if a project requires Youth Offending Teams (YOTs) to buy tablet computers, they might be used for 10 hours per week. However, only two of those might be devoted to the programme, the rest on supporting the other work of the YOT. This means only 20% of the costs of the tablets should be attributed to the programme. The rationale for this is whilst it's true that the programme may be inducing the organisation to spend money on this new equipment, it's reasonable to expect some of that additional cost to be met from other budgets where it has wider benefits outside the programme itself. It may be hard to gauge how much of an item like this will be used to benefit others outside the specific tasks linked to the programme. Evaluators should clearly state any assumptions made.

#### Benefits beyond the life of the programme

Where durable goods have benefits beyond the life of the programme no adjustments should be made. Some approaches to account for this include calculating the residual value of the equipment that's been purchased once the programme has finished. This requires making strong assumptions about the length of time the goods will be used for in the context of the programme, the annual average depreciation rate and the ability to release value from the item once the programme has finished. Due to these uncertainties, we do not want evaluators to adjust for this.

## **Accounting for non-attendance**

Cost estimates should be generated assuming full compliance (i.e. recruited participants attend all sessions).

Not everyone recruited into an intervention will attend all sessions and some will drop out before a fall course of sessions has ended. For the purposes of generating YEF cost estimates, it should be assumed that all participants that are recruited at the start of the intervention complete it. We might consider this the 'hypothetical' cost (i.e. the cost of what is proposed to be delivered). This is opposed to the 'actual' costed, based on what is delivered adjusting for non-compliance.

This is consistent with the principal of focusing on the financial cost estimates. Commissioners will need to fund interventions based on full compliance, where resourcing is committed up-front. If participants miss sessions, staff will still have to be paid and settings rented. For group sessions in particular, there would be minimal impact on the actual amount of resources that are paid, based on the numbers that turn up.

## **Reporting results**

#### Separating out cost estimates

Figures should be separated into prerequisite, set-up and recurring costs. Where the degree of support varies across participants and different types of intervention are combined, cost estimates should be reported separately only where outcomes are evaluated also for different subgroups.

#### Prerequisite, set-up and recurring costs

It's important to separate set-up from running costs. For programmes run once, set-up costs per participant will be high. For programmes run multiple times, set-up costs are spread out over multiple future cohorts, making them cheaper to run on average (see section on presenting results below). Cost estimates should be grouped as follows:

- Prerequisites: This should list what's expected to already be in place before a programme is implemented. These are things programme funders wouldn't be expected to pay for. This could include things like access to laptops/tablets for 2hrs a week, access to sports hall for 1hr a fortnight. Costs wouldn't necessarily be calculated for these as it's assumed these wouldn't need to be paid for.
- Set-up costs: These are the one-off costs necessary at the start of a programme. This would include training costs, materials and equipment purchased before implementation begins. In some cases, some resources may be considered a prerequisite for some and a start-up cost for others. Evaluators should use their judgment as to whether delivered in similar context others would be expected to be compensated for the costs of buying new equipment or whether most would already have these.
- Recurring costs: Costs that would be required each time the programme is implemented. For instance, this may include printouts, notebooks, and office materials, but may also include recurring fees to access programme manuals.

It may be difficult to separate out staff costs across each of categories, where activities are done by the same people. Evaluators should consider asking staff to complete diary entries on the amount of time they spend on different activities. This will allow staff costs to be apportioned between different kinds of activity.

#### Splitting results by type of activity and subgroups of participants

In most cases, participants within projects will receive broadly similar activity and levels of support (e.g. attending the same number of sessions). In some cases, however, activity may be more heterogenous. This may include:

- Combining different activities within a single intervention, for example mentoring and sport interventions, within a single project.
- Providing differentiated activity for different types of participants, such as combining elements of both universal provision for all and more targeted support for a subset at greater risk.

Where evaluators intend to separate out impact measures to account for heterogeneity within the delivery model cost estimates should also be disaggregated to account for the types of activity received. If there is no plan to produce separate impact measures for different subgroups based on variation in the delivery model, then costs estimates should not be disaggregated either.

## How should total costs be reported?

Total costs should be presented for one round of delivery for an average group or cohort receiving the intervention. Evaluators should decide what the appropriate grouping is in the context of the specific project. Costs per participant figures should be presented for set-up, recurring and total costs.

Cost estimates will need to be reported consistently to allow for comparison between programmes and approaches. One challenge is YEF projects are delivered in many different contexts, involving different numbers of participants, sizes of settings and numbers of delivery partners. This makes it hard to make comparisons. To aid this, we ask evaluators to produce two sets of figures:

- 1. Average costs for a typical single cohort receiving the intervention during the trial for one round of delivery; and,
- 2. Average costs per participant for one round of delivery.

Both average costs for a typical single cohort and costs per participants should be presented separately for set-up, recurring and combined costs.

#### Average costs for a single cohort

Total costs should be estimated from the perspective of the intervention run for a typical cohort from start to finish, for a single round of treatment or delivery. For example, if YEF is funding delivery of a programme run to groups of children in five different custody suits, evaluators should estimate the average costs of delivery for one such custody suit. This may involve collecting data from all sites and producing average estimates or collecting cost data from one site judged to be most representative.

The rational for producing average figures at this level is to allow commissioners to understand what it would cost to deliver once in one setting and for them to scale this depending on how they plan to roll the intervention out in their area. What constitutes a 'single cohort' will vary between interventions. What assumptions are made about this should be defined by the evaluator at the start of the project and set out in the evaluation plan. Some discretion is required, but rules of thumb include:

 Where a single group session is being run (e.g. with 30 participants per group attending 10 sessions), this is the primary unit average total costs should be estimated for

- Where group-based interventions are being run in multiple settings at a time or for multiple classes within a single setting, average cost estimates should be generated for a single group.
- Some interventions may be delivered at the setting level (e.g. whole school
  approaches to preventing bullying). Here, costs should be presented based on a
  representative school, or based on the average school size, from within the trial.
- Where approaches are 1-2-1 based, evaluators should consider the total number of cases managed by an average practitioner or within the context of the individual setting (e.g. police station or hospital) over the period of the trial.
- Where it's unclear what constitutes a typical 'single cohort' in the context of the
  project, evaluators should produce total cost estimates for all those that are recruited
  into the intervention at the start of the project.

Figures should to be split between set-up and running costs for each of the organisations involved in the project and combined. Set-up costs will need to be appropriately scaled to reflect the number of children intervention costs are being modelled for. If the intervention involves training costs, it's only the training costs to the practitioners working for the cohort as defined in the context of the cost estimates that should be included.

Costs will also need to be combined across delivery partners to produce total aggregate figures, this includes situations where similar, or the same, organisations might deliver the intervention in different geographical areas.

Care needs to be taken to avoid double counting, where payments are being made between delivering partners. Take for example a parenting and family intervention developer that is funded by the YEF to trial their approach in a school. The school is paid a fee to offset the notional administration costs they face (e.g. teachers supervision of the sessions, coordinating with the developer, access to the buildings etc.). The evaluator should record both the recruitment fees paid by the developer to the school and the costs that the school faces. When combining costs for the project as a whole, the higher of the recruitment fee and the calculated costs to the school should be included.

## Average costs per participant

Average cost per participant estimates should divide total costs by the total number of participants. Three figures should be presented:

- 1. Total set-up costs per participant
- 2. Total recuring costs per participant.
- 3. Total combined set-up and recurring costs per participant.

We ask for all three in-order to aid comparison of projects that may be run over multiple years. Figures for recurring cost are only to be modelled as if one round of the intervention were delivered. Given the upfront investment made, commissioners and providers would likely run the programme multiple times. The more times a programme is run without having to reinvest in start-up costs, the cheaper it effectively becomes per head. Presenting cost per head figures both with and without set-up costs, gives a sense of the maximum and minimum range.

Commissions may wish to use the separate upfront and recurring costs estimates to calculate for themselves what the programme will cost based on how many years of delivery they plan. Assumptions will need to be made for when reinvest in upfront costs for would need to happen, to account for things like staff turnover and the replacement of materials and equipment that wear out.

## **Accounting for uncertainty**

There will naturally be uncertainty around each input and assumption. Formal approaches to quantifying the impact of uncertainty include techniques such as Monte Carlo analysis, which involves multiple recalculations of the unit costs estimates, drawing on assumptions for each inputs' underling disruption or range. Less formal techniques include varying the main inputs judged to have the greatest impact on the estimates to provide an indication of how critical they are.

There is no expectation that evaluators conduct formal sensitivity analysis or provide credible ranges around their estimates. However, evaluators should provide sufficient detail in their discussion and presentation of the assumptions, so that a commissioner may replicate if required. This means for each of the inputs it would be desirable to provide estimates of precision. Where evaluators judge the uncertainty around individual assumptions to be sufficiently large (for example, whether volunteer time would need to be paid for if delivered in a context outside of the YEF funded trial) it may be appropriate to present final costs estimated under alterative scenarios.

## How should results be presented?

Mandatory reporting tables include: a full list and description of the items included in the cost; and, a detailed breakdown of cost estimates by item and delivery partner.

The two main reporting templates are found below. These are:

- The list of items included in cost estimates.
- The real combined costs figures for implementing the programme, by item and delivery partner.

These are mandatory in all evaluation reports. Evaluators may of course publish other information and tables as relevant to explaining the calculations and assumptions they've used. Of particular relevance are:

- Descriptions of the prerequisite items (i.e. facilities, equipment etc.) providers would be expected to have in place before the trial begins.
- Detailed breakdowns on staff cost calculations including the amount of time spent on each activity, salary assumptions and any time that's donated by others.
- Detailed breakdowns of how other individual items are costed, including application of price conversions from nominal to real values consistent with the chosen base year.

#### Template table: List of items included in cost estimates

Category	Description [Amount/Number, Set-up/Ongoing, Purpose]
Staff Item 1 Item 2	
Programme Item 1 Item 2	
Buildings & facilities Item 1 Item 2	
Materials & equipment Item 1 Item 2	

# Template table: Real cost of implementing the programme, by item and delivery partner

Price Year: XXXX/XX Category	Set-up or recurring	Delivery partner 1	Delivery partner 2	Delivery partner 3	Total
Staff Item 1 Item 2					
Programme Item 1 Item 2					
Buildings & facilities Item 1 Item 2					
Materials & equipment Item 1 Item 2					
Incentive Item 1 Item 2					
Other inputs Item 1 Item 2					

## Worked example

#### Background and perspective

The following example is based on an intervention delivered in schools to address risk-taking behaviour.<sup>4</sup> Young people aged 13-14 years were screened and those identified as being engaged in criminal activity, substance use and other high-risk activities were offered the opportunity to receive a brief motivational intervention. The study was part of a randomised controlled trial. The brief intervention was delivered in addition to care as usual, with the control group receiving care as usual only. In this example the intervention was delivered to a cohort of 210 participants.

The study was conducted in 2018/19 and costs have been adjusted to reflect 2020/21 prices. Using October 2021 HMT GDP deflators,<sup>5</sup> prices increased 6% between 2018/19 and 2020/21 and this adjustment is applied to all figures. The perspective is from that of the school as commissioner of the intervention. Only the costs of delivering the intervention have been included, no costs associated with the evaluation have been calculated.

## **Summary results**

The table below provides a summary of the brief motivational intervention's estimated costs. Total costs are estimated at £8,608 (in 2020/21 prices) for delivery to 210 participants. This is equivariant to £41 per participant. The largest drivers of cost were: the set-up costs associated with intervention training; the recuring staff costs of the learning mentors; and, the costs associated with contacting parents. Full details on the assumptions, calculations and results are in tables 2 and 3 below.

Table 1: Summary results

	Total costs	Cost per participant
Set-up	£3,923	£19
Recurring	£4,685	£22
Total	£8,608	£41

<sup>4</sup> The example given here is based on an actually cost analysis from a real-world programme. However, the inputs and calculations have been adapted for the purpose of generating a worked example and no-longer reflects the conclusions from the original study on which they're based.

<sup>5</sup> https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-october-2021-budget-and-spending-review

#### Inputs and calculations

#### Pre-requisite costs

It is anticipated that prior to the intervention being implemented schools have in their employment appropriate staff to deliver the role of learning mentor or pastoral support. In addition, staff have access to private rooms to deliver the intervention, facilities to conduct screening in the classroom environment and the means to allow parents to be contacted and if necessary, opt their child out of the intervention.

#### Set-up costs

Set-up costs occur at the beginning of the intervention. Specialist trainers provided 22 training sessions to train 33 learning mentors. Each trainer spent on average 7.5 hours per session including travel time to the locations. The staff costs are based on actual local costs taken as the pay scale grade for 2020/21 including employee costs such as national insurance and superannuation. The learning mentors were trained at their workplace during a scheduled in-service training day, facilities were provided by the school and the learning mentors were not back filled while the training occurred, no cost is attributed to the learning mentor for the training.

Each of the 33 learning mentors was provided with a training manual, this cost of these manuals in 2018/19 was inflated by 6% to reflect the cost in 2020/21.

#### **Recurring costs**

Each learning mentor was asked to keep a diary of how many minutes were spent on each aspect of the intervention. The preparation for the intervention included identifying and locating participants, arranging time and locations for the intervention and escorting participants from and to class. The average preparation time was 13.2 minutes. The intervention was delivered one-to-one and took on average 37 minutes. The costs associated with these activities were assessed using local salary costs based on 2010/21 pay scales. These included employer costs of national insurance and superannuation.

To identify who wanted to opt-out of taking part in the intervention, each parent was contacted using the school's existing systems and responses needed to be assessed. We estimated the cost at 30p per pupil. and inflated this from 2018/19 to 2020/21 prices using the 6% inflation figure. The type of contact differed by school with some sending consent forms by post with SAE to others who used automated SMS systems, the cost is estimated as the overall cost for all schools divided by the number of contacts. Significantly more parents and caregivers of pupils were contacted than participated in the intervention.

As part of the intervention, we screened pupils either during personal, social, health and economic (PSHE) classes or registration classes. Each screening form was estimated to cost 3p to print. We inflated this cost from 2018/19 to 2020/21 price by 6%.

A workbook was used by participants as part of the brief intervention. These workbooks cost 44p per participant to print. We inflated this cost from 2018/19 price by 6%.

## Full list of assumptions and results

Table 2: List of items included in cost estimates

Category	Description			
Staff				
Labour costs assumptions	Learning mentors and pastoral support staff average annual salary £19,905; employer contributions to National Insurance and superannuation £3,185; estimated to work 46 weeks per year (£502/week), 37 hours per week (£13.57/hour). Intervention trainer's average salary £32,600; employer contributions to National Insurance and superannuation £5,216, estimated to work 46 weeks per year (£822/week); 37.5 hours per week (£21.92/hour).			
Learning mentor training	Learning mentor time for intervention training was costed as zero as it was included as part of normal inservice training.			
Intervention trainers	Intervention trainers provided training at 22 sites, 7.5 hours per site including travel (based on mentors' log of the time each site took), at a cost of £21.92 per hour, £3,618.80, or £17.22 per participant.			
Learning mentor preparation	Preparation for one-to-one intervention (including identifying young person, liaising with teaching staff and collecting and returning young person from class) 2,772 minutes overall at £0.23 per minute, £637.56 overall or £3.04 per participant.			
Learning mentor delivery	Conducting one to one intervention, 7,770 minutes at £0.23 per minute, £1,787.10 overall or £8.51 per participant.			
Programme				
Bespoke learning manuals	The intervention was designed for the study and made available for non-profit use. The only cost was a bespoke manual for each learning mentor. The cost per manual was £8.70 at 2018/19 price, inflated to 2020/21 price by inflating by 6%, £9.22 for 33 mentors £304.33 overall, £1.45 per participant.			
Buildings & facilities				
None	The intervention was delivered on school premises during the school day, no additional costs were incurred.			

Materials & equipment					
Screening questionnaires	5,670 young people were initially screened. Screening was conducted during standard lesson time. The screening questionnaires cost 3p each. The total cost in 2018/19 was £170.10 (£0.03 x 5,670). The price adjustment of 6% is applied, yielding screening costs of £180.31 in 2020/21 prices, or £0.86 per participant.				
Worksheet	The intervention used a worksheet, costing £92.40 to print. Inflating to 2020/21 prices by 6%, the overall cost is £97.94 or £0.47 per participant.				
Incentives					
None	The intervention was delivered during the school day, no incentives for participating were offered to participants or schools.				
Other inputs					
Parent contact	Parents were contacted regarding child participation in the screening/intervention. The cost of this including emails to parents and processing of responses was estimated at £0.30 per contact, a total of 6,233 contacts were made, total cost £1,870, inflated from 2018 prices by 6%, a total of £1,982.20 or £9.44 per participant.				

Table 3: Real cost of implementing the programme, by item and delivery partner

Price year:	2020/21	Upfront or recurring?	Delivery partner					
Cost items			Intervention trainers	Schools	Total			
Staff								
Intervention tro	ainers	Set-up	£3,619	£0	£3,619			
Learning ment	or preparation	Recurring	£0	£638	£638			
Learning ment	or delivery	Recurring	£0	£1,787	£1,787			
Programme								
Bespoke learni	ng manuals	Set-up	£0	£304	£304			
Buildings & fac	cilities							
None		_	£0	£0	£0			
Materials & eq	uipment							
Screening que	stionnaires	Recurring	£0	£180	£180			
Worksheet		Recurring	£0	£98	£98			
Incentives		_						
None		_	£0	£0	£0			
Other costs								
Parent contact	-	Recurring	£0	£1,982	£1,982			
Total cost								
Set-up		_	£3,619	£304	£3,923			
Recurring		_	£0	£4,685	£4,685			
Total		_	£3,619	£4,989	£8,608			
Cost per partic	cipant							
Number of par	ticipants	_	_	_	210			
Set-up costs p	er participant	-	£17	£1	£19			
Recuring cost	oer participant	_	£0	£22	£22			
Total cost per participant		_	£17	£24	£41			







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hello@youthendowmentfund.org.uk



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We reserve the right to modify the guidance at any time, without prior notice.

The Youth Endowment Fund Charitable Trust
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