

Options for the evaluation of long-term outcomes of the National Citizen Service programme

Final Report to the Department for Digital, Culture, Media and Sport



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Table of Contents

Page

Executive Summary	iii
1 Introduction, aims and objectives	1
2 The National Citizen Service objectives and outcomes	3
3 Options for evaluation of long-term outcomes	6
4 Conclusions	18
ANNEXES	20
Annex 1 Theory of Change	21
Annex 2 National Citizen Service narrative	22
Annex 3 Team leader and NCS graduate interview summary	26
Annex 4 Literature review	41
Annex 5 Review of readily available secondary data sources	53
Annex 6 Use of literature and data review to measure and monetise outcomes	59
Annex 7 Bibliography	67

Index of Tables and Figures

Page

Tables

Table 1	Comparison of options for evaluation by summer 2019	vi
Table 2	Comparison of options for evaluation with no time constraint	vii
Table 3	To what extent can outcomes be evaluated under the ‘no time limit’ options?	vii
Table 4	Comparison of options for evaluation by summer 2019	6
Table 5	Comparison of options for evaluation going forward (no time constraint)	7
Table 6	To what extent can outcomes be evaluated under Option 3?	11
Table 7	Examples of sample size requirements	12
Table 8	To what extent can outcomes be evaluated under Option 4?	15
Table 9	NCS participant numbers	23
Table 10	Next Steps (LSYPE1), Age 25 Survey	53
Table 11	Millennium Cohort Study	57

Figures

Figure 1	Summary of study approach	v
Figure 2	Summary of study approach	4

Executive Summary

The National Citizen Service (NCS) is a youth programme that brings together young people aged 15 to 17 from a range of different backgrounds, to undertake activities aimed to improve their personal and social development, and engage in community action. The programme is managed by the NCS Trust, a community interest company established by the government to shape, champion and support the NCS.

National independent evaluations, commissioned annually since 2012 by the Department for Digital, Culture, Media & Sport (and previously the Cabinet Office), have consistently shown the **positive impact** the programme has on young people, and the fact that the programme delivers **good value for money**.¹ However, these studies have predominantly focused on the **short-term** impact immediately following the completion of the programme, in particular the impact of participation in the NCS on **leadership** and **volunteering** activities.

However, in reality, the NCS was developed with a set of **long-term social objectives**, namely:

- **social cohesion**: a country in which all young people feel a sense of belonging, based on trust and respect, as well as a sense of shared endeavour;
- **social mobility**: a society in which young people from all backgrounds have the capabilities and connections to take advantage of evolving opportunities, and fulfil their potential; and
- **social engagement**: a society in which young people have the awareness, skills and drive to serve and help shape the world around them.

A recent re-assessment of the Theory of Change (ToC) underpinning the NCS was undertaken by Shift and the NCS Trust. The updated Theory of Change (Annex 1) mapped these core long-term **objectives** of the programme to **nine long-term outcomes**.

What are the long-term outcomes under consideration?

Following on from the Theory of Change and qualitative assessment of their suitability for subsequent evaluation, the long-term outcomes of interest are for young people to:

- go on to have **higher educational outcomes**²;
- form **broader social networks**³;
- get **more involved in activities that benefit others**⁴;
- be **more involved in political processes** and **contribute their insights to public debate**;
- have the **confidence**⁵, **connections**⁶ and **attributes**⁷ to **make the most of opportunities** that present themselves⁸;
- go on to have **higher levels of social trust**⁹; and
- feel a **greater sense of belonging**¹⁰, both on exiting the programme and in the future.

¹ For further information about the NCS and the NCS Trust, please see <http://www.ncyes.co.uk/about-us>

² 'Higher educational outcomes' refers to increased levels of educational attainment, including increased participation in (and completion of) higher education qualifications, apprenticeships and other vocational qualifications.

³ The broadening of the set of people an individual customarily interacts with on respectful terms (e.g. friendship circles) across all dimensions in social life (e.g. gender, mental and physical health, religion, sexual orientation, ethnic, and socioeconomic backgrounds).

⁴ Volunteering and unpaid help provided to non-family members (e.g. taking care of someone who is sick)

⁵ Confidence denotes strength of belief without specifying the object of this belief, while perceived self-efficacy, on the other hand, relates to having belief in one's own capabilities to achieve or bring about particular outcomes. In the context of the NCS, when discussing recommendations to help improve this outcome (confidence), the NCS ToC suggests activities geared towards improving self-efficacy.

⁶ Any form of network support that would help young people achieve their professional, social, financial or personal goals

⁷ This outcome refers to the soft skills that make young people employable for instance (or other outcomes of interest).

⁸ Over and above the other potential outcomes described (e.g. higher educational attainment).

⁹ Defined as young people's perception that when dealing with most people, they can generally be trusted.

However, earlier evaluation work has mostly concentrated on the short and medium-term¹¹ effects of the NCS.¹² To date, no evaluation of the NCS has attempted to assess whether the programme has been successful in improving these **long-term outcomes**, or identifying the financial benefits associated with any improvement (should they exist).¹³ As such, there is currently no established approach to assess the extent to which the NCS delivers social impact and value for money to the Exchequer over the longer term.

Given this, London Economics and Kantar Public were commissioned by the Department for Digital, Culture, Media and Sport to investigate the feasibility of undertaking **an evaluation of the NCS based around these long-term outcomes**, and to **assess the different options** available to DCMS for commissioning such an evaluation (to deliver findings by Summer 2019 in time for the 2020 Spending Review, and beyond).¹⁴

What does 'long-term' mean?

There is a clear trade-off of how far into the future after participation on the NCS programme long-term outcomes can be measured. Specifically, many of the outcomes of interest are very long-term in nature. However, there is a question as to the extent to which participation in a 3 or 4 week programme might realistically influence young people a number of years into the future. The concept or definition of 'long-term' was addressed following an assessment of the wider literature and qualitative discussions with NCS Trust operatives, NCS graduates and team leaders. Although the literature was generally silent on the point, through the stakeholder consultations, a **5 year time horizon** was considered the most appropriate measure of 'long-term'. The rationale for this was that NCS graduates (and non-participants) would have reached a natural 'break' in their education career (following potential completion of formal education and/or apprenticeship or vocational training), and would be on the point of entering the labour market. In practical evaluation terms, the assessment of outcomes 5 years post-completion is **feasible** (though still challenging).

Under this timeframe, the report presents a number of feasible approaches for evaluation of the long-term impact of the NCS programme on young people who participated; and what is achievable under each approach.

Methodology and approach

The approach to undertaking the feasibility study consisted of a **review** of the existing **Theory of Change** of the NCS programme; a **qualitative discussion** with NCS graduates, team leaders and

¹⁰ Various definitions of belonging exist in the literature, each of which reflects important aspects of the concept in the context of the NCS, including "sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the classroom setting, and of feeling oneself to be an important part of the life and activity of the class" (Goodenow 1993); "frequent, affectively pleasant interactions with a few other people" (Baumeister and Leary, 1995); and which "take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare". Together, these definitions convey the aims of the NCS to foster positive interactions between individuals and groups, and instil in young people the sense that they are important to and valued by society.

¹¹ Candy, D., Gariban, S., Booth, C., Di Antonio, E. and Hale, C. (2017) *National Citizen Service 2013 Evaluation – Two Years On: Main Report*, Ipsos MORI Social Research Institute

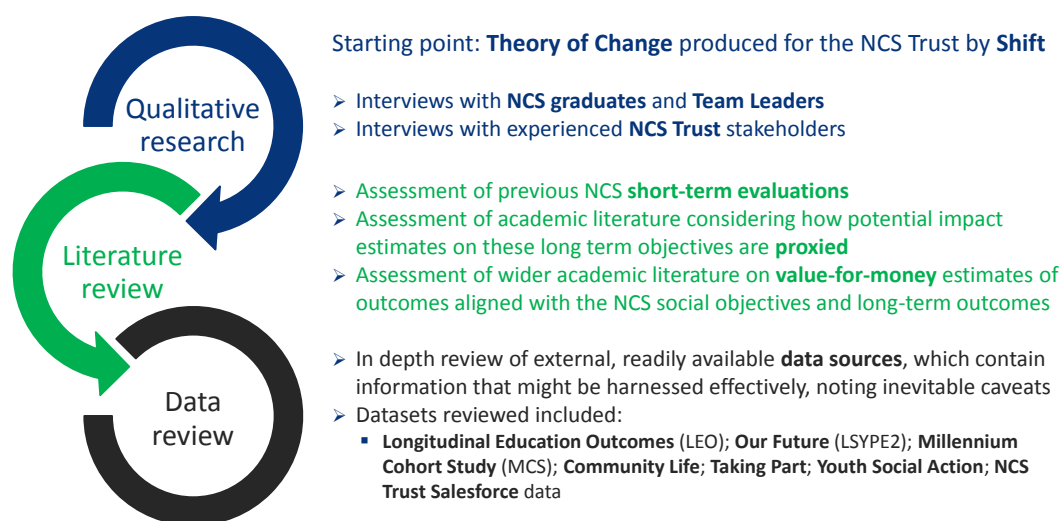
¹² It should be noted that the previous evaluations have focused predominantly on long-term benefits to young people, and have not attempted to assess any of the potential spillover effects that the NCS programme might have on other stakeholders, such as participants' families and NCS staff. As discussed in the recent 2016 evaluation of the NCS, it is likely that this approach will understate the total economic benefits associated with the programme, and understate the estimates of value for money (see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/678057/NCS_2016_EvaluationReport_FINAL.pdf).

¹³ A report produced by the National Audit Office (2017) concluded that at the time of publication, it was too early to assess the long-term impact of the NCS (See <https://www.nao.org.uk/wp-content/uploads/2017/02/National-Citizen-Service.pdf>)

¹⁴ Note that the scope of this feasibility study is to consider the long-term assessment of the value for money associated with the NCS as a whole. In other words, although there are different programmes available to participants (spring, summer and autumn), and the content of these programme vary to some extent by provider, the main goal of this report is to consider the options available for assessing the NCS programme as a whole.

senior NCS Trust stakeholders; a **literature review** of **previous NCS evaluations** and the **wider economic literature** relating to impact and the monetisation of long-term impact measures; and a **review** of existing secondary data sources. This is presented in Figure 1 overleaf.

Figure 1 Summary of study approach



Source: *London Economics*

Key findings - What can be achieved by summer 2019?

A detailed examination of the **consents** provided by respondents to previous NCS evaluations suggests that following up on respondents from earlier short-term evaluations is **not feasible** because these re-contact permissions do not allow for this. As such, there are two core options available:

- **Option 1** involving a **one-off survey** of NCS participants and individuals that expressed an interest but did not participate, drawn from NCST management information (Salesforce)
- **Option 2** involving the **linking** of respondents from the 2013/14 short term evaluation to existing databases (such as the **Longitudinal Education Outcomes (LEO)** database)

Key considerations for these two options are summarised in Table 1. Option 1 presents some **very severe methodological challenges**.¹⁵ In particular, the analysis relies on very strong assumptions about the comparability of NCS participants and the 'expression of interest' (EOI) counterfactual groups. Without a baseline measure for respondents, it is very unlikely that any analysis could fully control for the important systematic differences between the two groups. Furthermore, from a practical perspective, contacting a sample 5 years post completion (or expressing an interest in a programme that they did not participate in) would offer a significant practical challenge to researchers to develop the necessary large sample size, and would result in a substantial cost with limited benefit.

In relation to Option 2, only participation in publicly funded further education and training or higher education participation can be measured in LEO, and this limits the usefulness of the option as it addresses only one of the nine long-term impact outcomes. Additionally there may be **regulatory challenges** (i.e. consent to link) and **practical challenges** (i.e. limited information to

¹⁵ More generally, from a methodological perspective, it is important to note that any findings relating to the long-term impact of early cohorts of the NCS programme would be associated with a validity caveat. In particular, the content and delivery of the NCS programme has evolved since it was first launched, and therefore long-term outcomes of the early years of the programme might not necessarily reflect the impact and value for money that the current version of the programme delivers.

achieve a sufficiently robust match) associated with the linking of 2013 and 2014 NCS evaluations data to Department for Education Longitudinal Education Outcomes data. Further information is presented overleaf.

Table 1 Comparison of options for evaluation by summer 2019

Option	One-off NCS survey	Data linkage
What does this approach entail?	<ul style="list-style-type: none"> A one-off survey of participants and those who expressed interest but did not participate Sample drawn from NCS Trust Salesforce data (2013/14) 	<ul style="list-style-type: none"> Respondents from the 2013/14 short-term evaluations linked to NPD/HESA/LEO databases
How many of the outcomes can be evaluated with this approach?	<ul style="list-style-type: none"> All outcomes can be assessed, would be based on simple between-group comparison of outcomes post-NCS 	<ul style="list-style-type: none"> Analysis limited to educational outcomes (i.e. participation in higher education or apprenticeship training)
What are the challenges ?	<ul style="list-style-type: none"> With no baseline survey, the analysis would rely on extremely strong assumptions about the comparability of the participant and EOI samples EOI is not an ideal counter-factual sample for long-term impacts, especially without a baseline Re-contacting and surveying participants/EOI will be difficult given out of date contact details The reliance on self-report outcomes from a survey design that does not correct for the constructs of impression management or self-deceptive enhancement 	<ul style="list-style-type: none"> Unknown how successful linking will be given the limited details available for respondents (and the comprehensiveness and accuracy of potential matching variables) Some bias in which respondents agreed to data linkage (although this can be controlled for in the analysis)
What is the anticipated cost ?	<ul style="list-style-type: none"> c. £150,000 - £200,000 	<ul style="list-style-type: none"> c. £50,000

Key findings - What can be achieved with no immediate time constraint?

Looking at the feasibility of undertaking a long-term evaluation with no time-constraints, there are again two possibilities worth considering:

- **Option 3** involving a **bespoke survey** administered on a sample of 2019¹⁶ NCS participants (the treatment group) and a comparable sample drawn from the **National Pupil Database** (NPD) to form the counterfactual. The survey would be **longitudinal**: the first wave administered when participants are embarking on the NCS programme ('before'), followed by one or more 'after' surveys. Data gathering could take place as early as inter-departmental permissions are obtained.
- **Option 4** involving the **identification of NCS participants in existing external longitudinal surveys** that provide sufficient data for the assessment of NCS long-term outcomes, such as **Our Future** (LSYPE2) or the **Millennium Cohort Study** (MCS). This would allow the generation of a treatment group, with the **counterfactual** constructed using a group of non-participants found in that same dataset (selected based on observable characteristics similar to those of the NCS participants).

¹⁶ It might be possible to undertake this approach for 2018 NCS participants; however, the lead time involved in accessing the National Pupil Database is likely to prevent the administration of the survey being undertaken until 2019.

Although both of these options would provide a **superior** and defensible **methodology** for the evaluation of the long-term outcomes associated with the National Citizen Service compared to the summer 2019 options, neither is without challenges. A summary of the strengths and weaknesses associated with each of the options is presented in Table 2 and Table 3.

Table 2 Comparison of options for evaluation with no time constraint

Option	Longitudinal NCS survey	Using existing secondary datasets
What does this approach entail?	<ul style="list-style-type: none"> Bespoke longitudinal survey of NCS participants and non-participants, sampled from the NPD 	<ul style="list-style-type: none"> Adding a question about participation in the NCS to existing external longitudinal surveys (Our Future i.e. LSYPE2; MCS)
How many of the nine outcomes can be evaluated with this approach? (See Table 3 for additional detail)	<ul style="list-style-type: none"> Long-term impact measures: 8 to a “good” standard; 1 to a “fair” standard Value for money estimate: 2 to a “good” standard; 4 to a “fair” standard 	<ul style="list-style-type: none"> Long-term impact measures: 4 to a “good” standard (4 via MCS / 2 via LSYPE2); 4 to a “fair” standard (1 via MCS / 4 via LSYPE2) Value for money estimate: 1 to a “good” standard (1 via MCS / 1 via LSYPE2); 2 to a “fair” standard (2 via MCS / 1 via LSYPE2)
What are the challenges ?	<ul style="list-style-type: none"> Scale of fieldwork Inter-departmental barriers Participant consent Limited scope to undertake a ‘light’ version 	<ul style="list-style-type: none"> Small sample size, limiting analytical options Uncertainty about continuity of external datasets Inter-departmental barriers Participant consent
What is the anticipated cost ?	<ul style="list-style-type: none"> £2 million + 	<ul style="list-style-type: none"> < £100,000 £1.5-£2 million if LSYPE2 discontinued (and a follow-up survey commissioned as part of NCS research)

Table 3 To what extent can outcomes be evaluated under the ‘no time limit’ options?

Long-term outcome	Option 3		Option 4			
	LT impact measure	VfM estimate	LT impact measure (MCS)	VfM estimate (MCS)	LT impact measure (LSYPE2)	VfM estimate (LSYPE2)
Higher educational outcomes	✓	✓	✓	✓	✓	✓
Leave the programme with the confidence to make the most of opportunities that are presented	✓	✓	✓	✓	✓	✓
Leave the programme with the connections to make the most of opportunities that are presented	✓	✓	✓	✗	✓	✗
Leave the programme with the attributes to make the most of opportunities that are presented	✓	✓	✗	✗	✗	✗
YP go on to get more involved in (non-political) activities that benefit others – e.g. volunteering	✓	✓	✗	✗	✓	✗
YP go on to get more involved in the political process and contribute their insights to the public debate	✓	✗	✗	✗	✓	✗
YP go on to form broader social networks	✓	✗	✓	✗	✗	✗
YP go on to have higher levels of social trust	✓	✓	✓	✓	✗	✗
YP feel a greater sense of belonging in the future	✓	✗	✗	✗	✓	✗

Note: ✓ = “good standard”; ✓ = “fair standard” with some caveats; ✗ = “not achievable”

It should be noted that the two options have been discussed independently, but are **not mutually exclusive** and can be undertaken in parallel. Undertaking both approaches would potentially result in enhanced measurement validity from triangulating survey and administrative data to better understand the outcomes of interest.

Option 3: Strengths and weaknesses

- **Option 3** (i.e. creating a bespoke NCS longitudinal survey) would provide the greatest flexibility, since it allows the (current or new) annual evaluation questionnaire to be **amended** or **tailored specifically to the objectives of the long-term evaluation**. This would allow researchers to potentially identify impact and assign monetised benefits to many of these impacts.
- However, this option would also be very **costly** compared to other options, as a large sample will need to be drawn and tracked over time. In many respects, the **fieldwork** (and associated cost with both baseline and follow-up surveys, as well as maintaining the population of respondents between surveys) would be comparable to the costs of a pre-existing annual cohort study.
- Furthermore, and potentially most importantly, there is a risk that the long-term outcomes associated with the programme might not be **identified** even if relatively large. With a follow-up sample size of 3,000 respondents in both the treatment and comparison groups, the study would only be likely to detect relatively large impacts: at the 95% confidence level, there would be 80% power to detect true impacts of around five percentage points¹⁷. This implies that, without a very large sample size, the results may be too imprecise to draw robust conclusions about any long-term effects and relatively few (or potentially none at all) statistically significant impacts may be identified – even if the NCS programme was having impact in the long-term. In other words, investing significant resources to evaluate the programme may not yield the intended evaluation outcomes: however, this is a risk associated with any large-scale evaluation.
- Finally, there are some **regulatory burdens** to overcome. To undertake this analysis would require the agreement of other government departments (in particular the Department for Education) to use the National Pupil Database, which generally requires a significant lead time (usually at least 3-4 months) prior to generating and administering the survey.

Option 4: Strengths and weaknesses

- **Option 4** (i.e. **identification of NCS participants in existing external longitudinal surveys**) would provide researchers with the ability to identify the impact associated with several of the outcome measures (between 4 and 8, depending on whether LSYPE2 or MCS is used), and subject to a number of **methodological caveats**, monetised outcomes (between 1 and 3).
- **This approach is very cost effective**; however, any attempt to use these datasets would require the data owners' permission to identify NCS participants within the study, which would be achieved through the **inclusion of a new question** on the next wave of the external cohort study. This is by no means guaranteed.
- If this option is considered, given the fact that the LYSPE2 sample is drawn from the National Pupil Database, this allows for a 'spine' of data to be created. In other words,

¹⁷ A hypothetical impact of 5 percentage points is very large. Although short-term evaluation studies have identified impact sizes around 10-20 percentage points, in the longer term, we would expect some degree of erosion or dissipation, resulting in the true longer term impacts are likely to be smaller.

subject to the relevant permissions¹⁸, this information could be matched to a range of data sources covering **benefit dependency, earnings, employment** and potentially interaction with the **criminal justice system**. Furthermore, **very long-term** labour market outcomes could be identified on an ongoing basis as new information becomes available, which would provide useful insight beyond the five year period, when NCS graduates are already of employment age.

- **The number of NCS participants contained within these external longitudinal studies will be fairly low.** Currently, we estimate that approximately 1,000 NCS participants can be identified in LSYPE2 (Our Future) to begin with, however the actual sample size will be lower than that by the time of a follow-up survey (c. 500 participants for a LSYPE2 age 25 follow-up and c. 800 for the MCS).¹⁹
- **Currently, it seems unlikely that an age 25 follow-up of LSYPE2 will take place** (as occurred in previous iteration of LYSPE), and consideration might be given to the Department part-funding the age 25 follow up as an alternative to commissioning a bespoke survey. However, even without a follow-up survey, there could still be a significant benefit to policy makers and researchers from initiating the process of identification of NCS participants in these surveys – both for more general NCS research and also for the wider research community using LSYPE2.^{20 21}
- As with Option 3, there are a number of **consents** that would need to be put in place to allow for linking to other data sets.

There is always a **trade-off** associated with the different options in terms of the cost to undertake any potential analysis and the evaluation outcomes that might be achieved. However, in the case of undertaking a longitudinal study, significant additional resources will not necessarily provide any guarantee of being adequately able to identify the long-term impacts of the programme. In contrast, the relatively inexpensive option of using existing longitudinal and administrative data sets might provide some solutions – but would imply a lower sample size and would be inherently more limited in terms of the understanding the breadth of the long-term objectives of the programme. It is also worth noting that the repeated short-term evaluations have identified consistent impacts across a range of measures, and given the general consistency in previous evaluation findings, there may be some benefit in spacing the short-term evaluations so that they occur every other year, and use this freed-up resource to focus on long-term evaluation.

The next step for the Department and the NCS policy team involves assessing the various options presented here, and agree which ones should be undertaken in light of the various methodological and practical challenges identified, as well as the budgetary pressures associated with each option.

¹⁸ This would require that LSYPE2 permissions, and wave 7 LSPYE2 permissions in particular, cover indefinite future data linking under GDPR. It is not clear that the current LSYPE2 permissions would cover re-contact years later.

¹⁹ For these sample sizes, the real impact would likely need to be in excess of 8 or 9 percentage points for an analysis of MCS or LSYPE2 to have 80% power to detect an effect. .

²⁰ The relatively low NCS participants sample size should still be noted but is not necessarily a constraint for wider research.

²¹ It is not clear that the current LSYPE2 permissions would cover re-contact years later.

1 Introduction, aims and objectives

The National Citizen Service (NCS) is a youth programme that brings together young people aged 15 to 17 from a range of different backgrounds, to undertake activities aimed to improve their personal and social development, and engage in community action. The programme is managed by the NCS Trust, a community interest company established by the government to shape, champion and support the NCS.

Previous evaluations of the NCS have consistently shown a range of **positive impacts**, which translate into **benefit-to-cost ratios exceeding 1.0**.²² However, these studies have predominantly focused on the **short-term** impact immediately following the completion of the programme, in particular the impact of participation in the NCS on **leadership** and **volunteering** activities.²³

However, in reality, the NCS was developed with a set of **long-term social objectives**, namely:

- **social cohesion**: a country in which all young people feel a sense of belonging, based on trust and respect, as well as a sense of shared endeavour;
- **social mobility**: a society in which young people from all backgrounds have the capabilities and connections to take advantage of evolving opportunities, and fulfil their potential; and
- **social engagement**: a society in which young people have the awareness, skills and drive to serve and help shape the world around them.

A recent re-assessment of the Theory of Change (ToC) underpinning the NCS was undertaken²⁴, whereby the core long-term objectives of the programme were mapped to **nine long-term outcomes**. Despite the clear **economic and social impact** of these long-term outcomes, no evaluation work of the National Citizen Service to date has attempted to assess whether the NCS has been successful in improving these long-term outcomes, or identifying the financial benefits associated with any improvement should they exist. As such, there is currently no established approach to assess the extent to which the NCS delivers long-term value for money to the Exchequer.

Given this evidence gap, London Economics and Kantar Public were commissioned by the DCMS to investigate the feasibility of undertaking **an evaluation of the NCS programme based around these long-term outcomes**, and to **assess the different options** available to the DCMS for commissioning such an evaluation.

The report is set out as follows: in Section 2, we provide additional information on the National Citizen Service's core long-term objectives stemming from the recent Theory of Change, as well as the approach to undertaking this analysis. In Section 3, we provide an analysis of the potential options available for undertaking an evaluation of the National Citizen Service – where there is a short-term time constraint to deliver findings (June 2019) - but also where there is no specific time constraint. In this section, we also detail the extent to which the core objectives of the programme might be identified, as well as the feasibility of generating monetised benefits alongside impact measures. We also detail a range of sub-options, as well as an exposition of the main challenges associated with each option (including cost considerations). Section 4 concludes with a summary of the available options and associated challenges.

²² For further information about the NCS and the NCS Trust, please see <http://www.ncyes.co.uk/about-us>

²³ Note that in the most recent short term evaluation of the NCS, an alternative approach of monetising the wellbeing impact associated with participation in the NCS was undertaken as a sensitivity check. This approach also identified a positive economic impact of the programme, albeit with a higher variation in the results generated compared to the 'standard' analysis.

²⁴ Kantar Public & London Economics (2017a) *National Citizen Service 2016 Evaluation: Main report*, Kantar Public.

Note that to keep the main report manageable, we have also presented additional information arising from the review of literature and evidence gathered in a number of Annexes. In particular, Annex 1 summarises the Theory of Change; Annex 2 and Annex 3 provide a narrative of the NCS over time and NCS Team Leader and graduate consultation responses; Annex 4 and Annex 5 detail the literature and the data sets reviewed that underpin the estimation and monetisation of programme impacts; while Annex 6 details how in practice each outcome would be measured and monetised.

2 The National Citizen Service objectives and outcomes

Theory of Change

Since the National Citizen Service was launched in 2009, the theoretical framework for NCS evaluations has evolved in order to establish a clearer distinction between the programme's activities and outcomes. To set out the intended causal links between these programme activities and outcomes, a review of the Theory of Change framework has been undertaken (Annex 1). As a result, the NCS' Theory of Change now provides a strong framework linking the **nine long-term individual-level outcomes** associated with the programme that are expected to culminate in the fulfilment of the NCS' three primary social aims or objectives: improving **social mobility**, **social engagement** and **social cohesion**.

The longer term outcomes are as follows:

- young people go on to have **higher educational outcomes**²⁵;
- young people go on to form **broader social networks**²⁶;
- young people go on to get **more involved in activities that benefit others**²⁷;
- young people go on to be **more involved in political processes** and **contribute their insights to public debate**;
- young people go on to have the **confidence**²⁸, **connections**²⁹ and **attributes**³⁰ to **make the most of opportunities** that present themselves³¹;
- young people go on to have **higher levels of social trust**³²; and
- young people feel a **greater sense of belonging**³³, both on exiting the programme and in the future.

Given the broad agreement amongst NCS graduates and the NCS Trust (Annex 2 and Annex 3) in relation to the suitability of the Theory of Change linking long-term outcomes with the high-level programme aims, it is these outcomes that feed through to the rest of the analysis in this report relating to the options to estimate the programme's impact, as well as the existence and suitability of wider economic literature to monetise these possible impacts.

²⁵ 'Higher educational outcomes' refers to increased levels of educational attainment, including increased participation in (and completion of) higher education qualifications, apprenticeships and other vocational qualifications.

²⁶ This is defined as the broadening of the set of people an individual customarily interacts with on respectful terms (e.g. friendship circles) across all dimensions in social life (in terms of e.g. gender, mental and physical health, religion, sexual orientation, ethnic, and socioeconomic backgrounds).

²⁷ This outcome refers to volunteering and unpaid help provided to non-family members (e.g. taking care of someone who is sick)

²⁸ Confidence denotes strength of belief without specifying the object of this belief, while perceived self-efficacy, on the other hand, relates to having belief in one's own capabilities to achieve or bring about particular outcomes. In the context of the NCS, when discussing recommendations to help improve this outcome (confidence), the NCS ToC suggests activities geared towards improving self-efficacy.

²⁹ Any form of network support that would help young people achieve their professional, social, financial or personal goals

³⁰ This outcome refers to the soft skills that make young people employable for instance (or other outcomes of interest).

³¹ Over and above the other potential outcomes described (e.g. higher educational attainment).

³² Defined as young people's perception that when dealing with most people, they can generally be trusted.

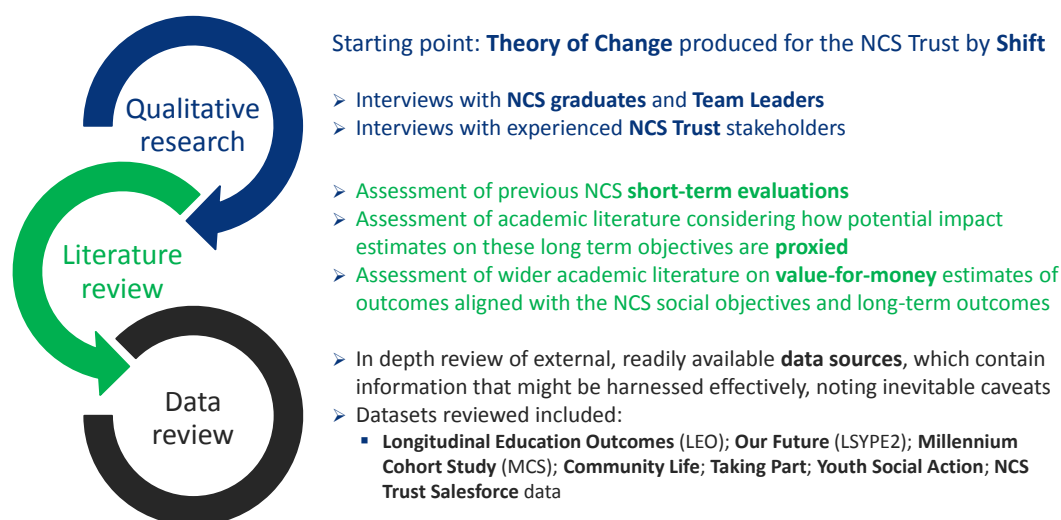
³³ Various definitions of **belonging** exist in the literature, each of which reflects important aspects of the concept in the context of the NCS, including "sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the classroom setting, and of feeling oneself to be an important part of the life and activity of the class" (Goodenow 1993); "frequent, affectively pleasant interactions with a few other people" (Baumeister and Leary, 1995); and which "take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare". Together, these definitions convey the aims of the NCS to foster positive interactions between individuals and groups, and instil in young people the sense that they are important to and valued by society.

2.1 Approach to the study

Presented below in Figure 2, the methodology and approach of the feasibility study consisted of a combination of:

- a **review** of the **Theory of Change** of the NCS programme (Annex 1);
- a **qualitative discussion** with NCS graduates, team leaders and senior NCS Trust operatives (Annex 3);
- a **literature review** of previous NCS evaluations and the wider economic literature relating to impact and the monetisation of long-term impact measures (Annex 4); and
- a **review of existing secondary data sources** (Annex 5).

Figure 2 Summary of study approach



Source: *London Economics*

Qualitative research

Following the Theory of Change review and consultation with senior stakeholders from within the NCS Trust and NCS providers, NCS graduates and team leaders were interviewed in order to test that the outcomes mapped under the Theory of Change resonate with their experience of the programme (Annex 3).³⁴

Literature review

A core stage in the feasibility analysis was the review of the existing literature relating to:

- **previous NCS short-term evaluations** to assess whether the developed questionnaires can be a useful instrument, or can reasonably be modified, to measure long-term outcomes of the NCS;
- **academic literature** considering how potential impact estimates on these long-term objectives are estimated or approximated; and
- **wider academic literature** on value for money estimates of outcomes aligned with the NCS long-term outcomes.

The results of the literature review were used to inform the evaluation options developed in Section 3 of this report. Detailed findings of the review are made available in Annex 4.

³⁴ Findings from the interviews with senior NCS Trust operatives to gain an insight on how the programme has evolved and will continue to evolve over time are provided in Annex 2 and Annex 3.

Review of existing secondary data sources

Lastly, we undertook a review of **external, readily available data sources**, which contain information that might be harnessed to varying degrees of effectiveness under some of the evaluation options proposed in this report. The review included an assessment whether survey participants are of the NCS age, and if so, an estimation of the expected NCS participants **sample size**; whether the datasets contain data **relevant** to the long-term outcomes of interest; and what **survey questions** can be precisely related to these outcomes.

With this criteria in mind, datasets reviewed included:

- **Longitudinal Education Outcomes** (LEO);
- **Our Future** (LSYPE2);
- **Millennium Cohort Study** (MCS);
- **Community Life**;
- **Taking Part**;
- **Youth Social Action**; and
- **NCS Trust Salesforce** data fields.

Annex 5 contains a summary of the potentially useful questions and variable codes from the datasets proposed for use under the evaluation options outlined later.

2.1.1 Definition of ‘long term’

There is no clear guidance in the evaluation literature of what constitutes a ‘long-term’ impact. There is a clearly a trade-off of how far into the future after the NCS long-term outcomes can be measured – and this is one of the key issues that was addressed at an early stage of the analysis with stakeholders. Specifically, many of the outcomes that might be achieved through participation in the programme are much longer term in nature; however, there is a question as to the extent to which participation in a 3 or 4 week programme might realistically have an influence on the specific measures under consideration too far into the future – and the extent to which these impacts (if they exist) might be identifiable through standard research approaches. For instance, it may be the case that the decision to participate in the democratic process is impacted by NCS participation 10 years after completion; however to identify this impact robustly – controlling for other confounding factors that might occur in the intervening period (especially at an age when individuals participating in the NCS are making so many fundamental decisions in relation to their future education and labour market paths) – is theoretically possible, but practically infeasible.

Therefore, we tested the concept of ‘long-term’ with NCS graduates through qualitative discussions (as well as asking keys stakeholders in the NCS Trust and NCS providers). The responses suggested that the ‘long-term’ outcomes mentioned in the Theory of Change were reasonable and relevant (i.e. were long-term outcomes) and that a **5 year time horizon** would be appropriate to assess impact. One of the fundamental rationales for selecting this time horizon was the fact that by this point, many NCS graduates (and non-participants) would have reached a natural ‘break’ in their education (following potential completion of formal education and/or apprentice vocational training), and would be on the point of entering the labour market. In practical evaluation terms, the assessment of outcomes 5 years post completion is feasible (though still challenging). The analysis of options presented in the next section outlines the feasibility of the alternative approaches given this timeframe.

3 Options for evaluation of long-term outcomes

This chapter of the report discusses the options available to DCMS for undertaking an evaluation of the NCS impact on long-term outcomes.

Table 4 and Table 5 below summarise at a high level the options for evaluation in the first instance by summer 2019 (ahead of the next Spending Review), and looking forward with no time constraint, respectively. The tables illustrate what can be achieved under each option; the main challenges associated with each option; and the anticipated cost associated with each option. It should be noted, however, that the options for long-term evaluation without a time constraint are not mutually exclusive and could be undertaken in parallel, if funding permits.

The rest of the chapter discusses in further detail the sets of options for evaluation and the associated issues: by summer 2019 (Section 3.1), and with no time constraint (Sections 3.2 and 3.3).

Table 4 Comparison of options for evaluation by summer 2019

Option	One-off NCS survey (Option 1)	Data linkage with external datasets (Option 2)
What does this approach entail?	<ul style="list-style-type: none"> A one-off survey of participants and those who expressed interest but did not participate Sample drawn from NCS Trust Salesforce data (2013/14) 	<ul style="list-style-type: none"> Respondents from the 2013/14 short-term evaluations linked to NPD/HESA/LEO databases
How many of the outcomes can be evaluated with this approach?	<ul style="list-style-type: none"> All outcomes can be assessed, would be based on simple 'between-group' comparison of outcomes post-NCS 	<ul style="list-style-type: none"> Analysis limited to educational outcomes (i.e. participation in higher education, publicly funded apprenticeships and vocational training)
What are the challenges ?	<ul style="list-style-type: none"> With no baseline survey, the analysis would rely on extremely strong assumptions about the comparability of the participant and EOI samples EOI is not an ideal counter-factual sample for long-term impacts, especially without a baseline Re-contacting and surveying participants/EOI will be difficult given out of date contact details The reliance on self-reported outcomes from a survey design that does not correct for the constructs of impression management or self-deceptive enhancement 	<ul style="list-style-type: none"> Unknown how successful linking will be given the limited details available for respondents Some bias in which respondents agreed to data linkage (although this can be controlled for in the analysis)
What is the anticipated cost ?	<ul style="list-style-type: none"> c. £150,000 - £200,000 	<ul style="list-style-type: none"> c. £50,000

Table 5 Comparison of options for evaluation going forward (no time constraint)

Option	Longitudinal NCS survey (Option 3)	Using existing secondary datasets (Option 4)
What does this approach entail?	<ul style="list-style-type: none"> Bespoke longitudinal survey of NCS participants and non-participants sampled from the NPD 	<ul style="list-style-type: none"> Adding a question about participation in the NCS to existing external longitudinal surveys (Our Future i.e. LSYPE2; MCS)
How many of the nine outcomes can be evaluated with this approach? (See Table 3 for additional detail)	<ul style="list-style-type: none"> Long-term impact measures: 8 to a “good” standard; 1 to a “fair” standard Value for money estimate: 2 to a “good” standard; 4 to a “fair” standard 	<ul style="list-style-type: none"> Long-term impact measures: 4 to a “good” standard (4 via MCS / 2 via LSYPE2); 4 to a “fair” standard (1 via MCS / 4 via LSYPE2) Value for money estimate: 1 to a “good” standard (1 via MCS / 1 via LSYPE2); 2 to a “fair” standard (2 via MCS / 1 via LSYPE2)
What are the challenges ?	<ul style="list-style-type: none"> Scale of fieldwork Inter-departmental barriers Participant consent Limited scope to undertake a ‘light’ version 	<ul style="list-style-type: none"> Small sample size, limiting analytical options Uncertainty about continuity of external datasets Inter-departmental barriers Participant consent
What is the anticipated cost ?	<ul style="list-style-type: none"> £2 million + 	<ul style="list-style-type: none"> c. £100,000 £1.5-£2 million if LSYPE2 discontinued (and a follow-up survey commissioned as part of NCS research)

3.1 Options for evaluation by summer 2019

An evaluation of the long-term outcomes of the NCS that concludes in summer 2019 can only be performed on NCS participants who have graduated from the programme sufficiently long ago for such outcomes to have potentially occurred. Therefore, the latest cohorts of NCS participants that might be included in such an evaluation can reasonably be the 2013 and 2014 cohorts.³⁵

At a first glance, one obvious option for a long-term evaluation on the 2014 and earlier cohorts would be to follow up respondents from earlier short-term evaluations associated with these NCS cohorts. However, a detailed examination of the **consents for re-contacting** provided by respondents to previous NCS evaluations suggests that following up five or more years after the consent was signed is **not feasible** because the existing re-contact permissions do not allow for this (both under current and future legislation).

As such, there are two core options that remain available:

- **Option 1: Undertaking a one-off survey** of NCS participants and individuals that expressed an interest but did not participate in the NCS (EOIs), drawn from NCS Trust’s customer relationship management system (Salesforce data)

³⁵ It should be noted, however, that any findings on the long-term impact of early editions of the NCS programme would be associated with a validity caveat. The NCS programme content and delivery has evolved since it was launched, and therefore long-term outcomes of the early years of the programme might not necessarily reflect the impact and value for money that the current version of the programme delivers.

- **Option 2: Linking data** on respondents from the 2013/14 short-term evaluation to existing databases (such as the **Longitudinal Education Outcomes** (LEO) database).

Challenges associated with Option 1: Undertaking a one-off survey

Although all long-term outcomes of interest could be captured in a one-off survey, there are some **very severe methodological challenges** associated with this 2019 evaluation option.

Firstly, the analysis would be based on the **assumption** that both the personal and socio-economic characteristics of the two groups - NCS participants and individuals who expressed interest but did not participate in the NCS ('EoI' group) - are similar enough for comparison in terms of unobservable characteristics. However, it is likely that the counterfactual group formed of EOIs is fundamentally different. For example, it is possible that a large share of the EOI group is composed of individuals who were either not sufficiently motivated to partake in the NCS; or were genuinely motivated but spending time on the NCS posed a significant opportunity cost to them and their families (e.g. the cost of not having a summer job). For this reason, any difference in the long-term outcomes of interest between the two groups would likely be due to not only participation in the NCS, but also other underlying key differences between the two groups.

Another methodological concern is the lack of information on how the **baseline measures** for the outcomes under consideration compare between the two groups. To attribute any differences 5 years post-participation to the NCS programme, this approach assumes that the baseline measures would be comparable. This is highly unlikely to be the case and so would significantly impact the validity of any published findings. Finally, this option could only be undertaken if the **contact permissions** collected by NCS Trust permit re-contact of participants for research under GDPR.

Finally, from a **practical perspective**, contacting and successfully surveying a sample 5 years post completion (or expressing an interest) would offer a significant challenge to researchers and result in a relatively substantial cost (with potentially limited benefit). Many individuals' contact details, for instance, might have changed since completion of the NCS and would have not necessarily been updated as there was no anticipation of re-contact ever taking place.

Challenges associated with Option 2: Linking data on previous evaluation respondents

The data linking option entails matching data on NCS participants and EOIs who took part in the 2013 and 2014 short-term NCS evaluations to existing secondary datasets. Given the type of information available in the NCST database, the type of information held in external secondary datasets, and the sample sizes of such datasets, the only feasible option is to link NCS Trust data to the **Longitudinal Educational Outcomes** (LEO) dataset (which contains information on participation and achievement in publicly funded further and/or higher education; earnings and employment information; and benefit dependency data).

The main drawback associated with this option is the fact that it would provide a **very narrow** view on the long-term impact of the NCS. In particular, only improved participation in publicly funded further education and training or higher education participation might be captured as a long-term outcome of the NCS. Therefore, undertaking this option would be of very limited usefulness as it would provide reporting on **only one out of nine long-term outcomes** of the programme. As a result, such an evaluation approach carries the risk of the economic impact of the programme being **misrepresented** and the long-term impact of the NCS being significantly **underestimated**.

Furthermore, the data linking option for a summer 2019 evaluation is associated with a set of **regulatory challenges** and **practical challenges**. More specifically, to link NCS Trust data to an external dataset a number of years after participation in the NCS, it will have to be verified that individuals' consent complies with the new **General Data Protection Regulation (GDPR)** that will apply in the United Kingdom from 25th May 2018.

Finally, in terms of practical challenges, there is a possibility that the information in the NCS Trust dataset and that in LEO is insufficiently detailed for a high match rate of the two datasets to be achieved; however this could not be uncovered until further on in the analytical process.

3.2 Long-term Option 3: Undertaking a bespoke longitudinal NCS survey

3.2.1 Evaluation approach of Option 3

The first option for evaluation of long-term outcomes proposes to construct a **longitudinal panel survey** administered on a sample of NCS participants (the treatment group); and on a comparable sample drawn from the National Pupil Database (NPD) to form a counterfactual group. This approach provides **the most flexibility** in terms of the **design of outcome measures** and the targeted **sample size**; but also in terms of the **number and timing of follow-up survey waves**.

Survey instrument

A new, purposefully designed survey of participants would be the most appropriate survey instrument, as it can be adapted to the updated NCS Theory of Change to best reflect the anticipated long-term outcomes of the NCS. Such a survey could reasonably draw on questions devised for the previous evaluations of the short-term outcomes of the NCS (e.g. see Kantar Public and London Economics, 2017b) and amend, tailor or add questions as appropriate, to most closely meet the objectives of the long-term evaluation. This would allow researchers to potentially identify impact (where such impact exists) and assign monetised benefits to many of these impacts.

Sampling and construction of the counterfactual

The most appropriate sample frame for the control group in a bespoke longitudinal survey would be **the National Pupil Database (NPD)**. A new sample drawn from the NPD would allow for a larger control group that can be matched to the NCS participant group based on observable characteristics (e.g. geography, performance in early Key Stage qualifications, and measures from the baseline NCS survey). This could be implemented using a tried-and-tested Propensity Score Matching (PSM).

It is anticipated that the **selection bias** that might occur would be lower for a comparison group sampled through the NPD than a counterfactual constructed using NCS Expressions of Interest (EOIs) supplemented with online panels. While it can be considered appropriate for the evaluations of short-term outcomes of the NCS to use EOIs and online panels as the sample frame for the counterfactual group, potential bias is a larger concern for a long-term evaluation. This is because when evaluating short-term outcomes, it is less likely that such between-group differences have affected these outcomes, as they are more experiential. In the long-run, biases can cause an underlying difference in e.g. educational levels. While it might be reasonable to assume that the systematic differences for EOIs and online panels will not make a material difference over just a few months, it might not be the case that these will remain irrelevant over a number of years.

Research ethics

The **ESRC framework** for research ethics sets out six core principles for ethical research:³⁶

- research should aim to maximise benefit for individuals and society and minimise risk and harm;
- the rights and dignity of individuals and groups should be respected;
- wherever possible, participation should be voluntary and appropriately informed;
- research should be conducted with integrity and transparency;
- lines of responsibility and accountability should be clearly defined; and
- the independence of research should be maintained and where conflicts of interest cannot be avoided they should be made explicit.

The **Market Research Society Code of Conduct**³⁷ also provides guidance on carrying out research in an ethical manner. Here we briefly discuss some of the particular considerations in running a longitudinal study.

First, it would be necessary at the outset of the study to ensure it is clear to young people that they have a choice whether or not to participate in the study. As part of this, it would need to be clearly stated:

- how participants' personal information will be managed and processed;
- how often participants can expect to be contacted;
- how participants can ask any questions about the study, or find further information;
- how participants can withdraw from the study; and
- how the study is funded.

Second, if any participants are under the age of 16 at the beginning of the study, processes would need to be put in place to gain permission from their parents that they can take part. Third, processes would need to be developed to address any concerns or complaints raised by participants. Fourth, the confidentiality and security of any personal information would need to be ensured. This is especially important in that personal contact details will need to be maintained over the course of the study. It should be straightforward for participants to be able to find out what information is kept about them, how this is stored, how this will be used, and who has access to this information. Finally, full technical details about the management and design of the study should be published in the interests of integrity and transparency.

3.2.2 Evaluation of outcomes under Option 3

In Table 6 overleaf, for **each long-term outcome** we have summarised:

- whether a robust **long-term impact measure** can be devised using a purposefully designed survey instrument; and
- whether a **value for money methodology** exists that can be reasonably and feasibly applied to the long-term indicator, based on the literature review performed as part of the feasibility study (Annex 1).

Annex 6 provides further details for each long-term outcome on how exactly the impact measure could be constructed under each evaluation option, and how the outcome can be monetised.

³⁶ <http://www.esrc.ac.uk/funding/guidance-for-applicants/research-ethics/our-core-principles/>

³⁷ https://www.mrs.org.uk/standards/code_of_conduct

Table 6 To what extent can outcomes be evaluated under Option 3?

Long-term outcome	Long-term impact measure	VfM estimate
SM2: Higher educational outcomes	✓	✓
SM3a: Leave the programme with the confidence to make the most of opportunities that present themselves	✓	✓
SM3b: Leave the programme with the connections to make the most of opportunities that present themselves	✓	✓
SM3c: Leave the programme with the attributes to make the most of opportunities that present themselves	✓	✓
CE3: YP go on to get more involved in (non-political) activities that benefit others – e.g. volunteering	✓	✓
CE4: YP go on to get more involved in the political process and contribute their insights to the public debate	✓	✗
SC1: YP go on to form broader social networks ³⁸	✓	✗
SC4: YP go on to have higher levels of social trust	✓	✓
SC3: YP feel a greater sense of belonging in the future	✓	✗

Note: ✓ = “good standard”; ✓ = “fair standard” with some caveats; ✗ = “not achievable”

3.2.3 Challenges associated with Option 3

This section discusses in further detail each of the challenges associated with Option 3 previously summarised in Table 5.

Scale of fieldwork and managing attrition

The necessary sample size would depend on the size of impact that researchers are attempting to identify (see next section) and would be substantially larger than that for the short-term evaluations conducted in the past. Given the longer time period of analysis, it is likely that the attrition rate would be higher than for the short-term evaluations, which would have a direct impact on the potential costs associated with the study. Essentially, given the size of both treatment and counterfactual groups under consideration, as well as the resources required to limit the extent of sample attrition, this proposed option would have comparable costs to a longitudinal cohort study.

Identifying existing impact

Furthermore, and potentially most importantly, there is a risk that the long-term outcomes associated with the programme might not be identified even if relatively large. With a follow-up sample size of 3,000 respondents in both the treatment and comparison groups, the study would only be likely to detect large impacts. For instance, at the 95% confidence level, there would be 80% power to detect true impacts of around **five percentage points**.³⁹ These hypothetical impacts are very large indeed. Table 7 below provides guidance examples on the sample size necessary, depending on the size needed in order to detect a true NCS impact of various magnitudes.

³⁸ The impact of the NCS on social network breadth can be assessed, but monetisation would be difficult as this notion overlaps with several of the other outcomes. There would be a level of overlap with SM3b.

³⁹ A hypothetical impact of 5 percentage points is very large. For instance, the evaluation of the Education Maintenance Allowance (which provided cash payments of up to £30 per week to young people remaining in post-16 education and was associated with a £560 million cost) identified increased participation rates by between 4 and 7 percentage points (Dearden et al (2007)), while the impact on attainment was stated as being approximately 2 percentage points (reference Chowdry et al (2010)). The EMA was perceived as having a very significant impact (and associated cost). In relation to the NCS, although short-term evaluation studies have identified impact sizes around 10-20 percentage points, in the longer term, we would expect some degree of erosion or dissipation, resulting in longer term impacts being smaller than those identified in the short term evaluations.

Table 7 Examples of sample size requirements

Number of interviews achieved in follow-up survey ^[1]	Minimum necessary baseline survey sample size ^[2]	80% power to detect a true impact of... ^[3]
1,000 NCS participants; 1,000 comparison group	4,000 NCS participants; 4,500 comparison group	...c. 8 percentage points
3,000 NCS participants; 3,000 comparison group	12,000 NCS participants; 13,500 comparison group	...c. 5 percentage points
5,500 NCS participants; 5,500 comparison group	22,000 NCS participants; 25,000 comparison group	...c. 3.5 percentage points
10,000 NCS participants; 10,000 comparison group	40,000 NCS participants; 45,000 comparison group	...c. 2.5 percentage points

Note: [1] Assuming an overall design effect of around 1.5 i.e. that the effective sample size is 1.5 times smaller than the total number of interviews achieved. This allows for weighting the participants sample to compensate for attrition and non-response - a design effect of a similar scale to that in the age 25 follow-up from the first LSYPE cohort. It also allows for the effect of PSM - a design effect of a similar scale to that for the comparison group in the short-term 2016 NCS evaluations. If the design effect is larger, then the statistical power would be lower. [2] Assuming re-contact permissions similar to the 2016 short-term evaluation, and attrition rates similar to those of LSYPE2. To allow for attrition, the sample size at the baseline survey would have to be far higher than that of any follow-up survey. Under the assumptions that (i) 50% of baseline respondents both agree to re-contact and provide contact details (assumptions roughly in line with the 2016 short-term NCS evaluation), and (ii) 50% of these respondents then go on to complete the follow-up survey (the response rate achieved on the LSYPE1 age 25 follow-up), that would imply the total number of interviews at the baseline needs to be at least four times greater than the target number of follow-up interviews. It should be noted that this is a relatively optimistic scenario and that attrition is likely to be substantially greater than this, depending on the resources committed to keeping in touch with respondents and encouraging response at any follow-up waves. [3] Based on survey estimates centred around 50% (i.e. where confidence intervals are widest). These estimates also assume covariance between waves of around 0.003 - roughly the level of covariance observed for similar questions over 6-10 years in the age 25 follow-up from the first LSYPE cohort.

Therefore, without a very large sample size, the results may be too imprecise to draw robust conclusions about any long-term effects and relatively few statistically significant impacts may be identified – even if the NCS programme is generating impact in the long-term. In other words, investing significant resources to evaluate the programme may not yield the intended evaluation outcomes.

High cost of administering the survey

This option would be potentially the most effective but also the most costly amongst all options, given the large sample necessary to be drawn and tracked over time. As previously mentioned, the fieldwork (and associated cost with both baseline and follow-up surveys, as well as maintaining the population of respondents between surveys) would be comparable to the costs of other cohort studies. Given this, it is anticipated that this option would cost somewhere in the range of £2 million - £6 million.⁴⁰ The 'lighter' options at the lower cost range, however, would have significant methodological issues and risks associated with them (as discussed in section 3.2.4).

Inter-departmental barriers

In addition to the methodological and fieldwork-related challenges, there are some regulatory barriers to overcome. To undertake this analysis in time for the 2018 baseline survey to be redesigned and administered would require the agreement of other government departments (Department for Education) to use the National Pupil Database. This could take a considerable amount of time to achieve (at least 3-4 months), and obtaining agreement would be one of the first steps required as part of this option.

If this option also incorporates merging to the LEO dataset for future tracking of the cohort, it would also require the co-operation and agreement of other government Departments to incorporate post participation outcomes (HM Revenue and Customs and the Department for Work and Pensions).

⁴⁰ Estimates based on sample size ranging between 3,000 and 10,000 NCS participants and between one and three follow-up waves.

Consent and the GDPR

Related to the above, survey respondents would need to provide consent to being re-contacted over a longer period of time. Moreover, the **General Data Protection Regulation** (GDPR) comes into effect in May 2018, replacing the previous Data Protection Directive 95/46/EC. GDPR places more stringent requirements on the ways in which organisations handle and protect personal information. We strongly recommend that DCMS and NCS Trust take legal advice regarding the implications of GDPR for a long-term NCS evaluation. Here we briefly mention three areas of particular relevance.

First, consents must be clearly recorded and the use of personal data unambiguously specified. If a longitudinal study is conducted, respondents will need to actively give consent to be re-contacted for future waves, and the wording of any re-contact permission question must make clear the purposes and scope of the study. The time period is important as DCMS / NCS Trust may be asking respondents for permission to link their data years in the future once higher education and employment outcomes become available. It should be recognised that consent rates for re-contact may decline as GDPR starts to apply.

Second, there is a duty to keep any personal information held about respondents up to date. With a longitudinal study, personal information can be confirmed at each wave. However, if there are a number of years between waves, it will be necessary to contact respondents periodically to ensure that the information is correct. Of course, a number of requirements will remain under the new legislation including taking measures to ensure appropriate security of personal data, whether that is technical or procedural (e.g. staff training). For more general research ethics compliance, please refer to the earlier 'Research ethics' section in this chapter.

3.2.4 Sub-options

Some of the key challenges discussed in the previous section related to scale and sample size of the potential bespoke survey; cost versus sample attrition trade-offs; and the ability to detect impact. All of these impact the resources required for fieldwork activity. Within this option, however, there is a wide set of potential choices to be made in terms of the fieldwork approach.

As an indication, at the lower end of the cost range, with fewer resources being deployed into sample maintenance between the surveys, a fieldwork agency could achieve one follow-up wave with a final sample of c. 3,000 NCS participants and 3,000 non-participants. However, as previously indicated, because of the inability to identify anything except the very largest impacts, this sample size would be insufficient.

At the higher end of the range, on the other hand, a fieldwork agency could possibly start by surveying the full NCS cohort of interest, keep regular track of the initial sample, update their contacts continuously over time and gather intermediate information over 2-3 follow-up surveys; and eventually achieve a sample size of c. 10,000 NCS participants and 10,000 non-participants having completed the survey (though even with this achieved sample, there is a question as to whether it is sufficient to achieve the ability to identify impacts between the treatment and counterfactual groups – as is the case with any evaluation).

Therefore, a wide range of choices related to the fieldwork would have to be made under this option, and these choices might ultimately result in a very different outcome of the evaluation in terms of statistical significance of impacts.

3.3 Long-term Option 4: Using existing secondary datasets

3.3.1 Evaluation approach of Option 4

The second option for evaluation of long-term outcomes proposes to identify NCS participants in **existing external longitudinal surveys** that provide sufficient data for the assessment of NCS long-term outcomes. A number of datasets were considered under this option (see section 2.1.1). Out of those, two datasets were deemed sufficiently useful to accommodate this evaluation: the **Millennium Cohort Study (MCS)**⁴¹ managed by the Centre for Longitudinal Studies, and **Our Future (LSYPE2)**⁴² managed by the Department for Education.

Identifying NCS participants in existing secondary datasets

In order to identify whether an individual respondent in the MCS or LSYPE2 has taken part in the NCS, the most reliable approach would involve including a very brief question on NCS participation in the respective cohort study. Survey respondents who had taken part in the NCS would form the 'treatment' group. The counterfactual would be constructed using group of non-participants found in the particular dataset, selected based on observable characteristics similar to those of the NCS participants. The identification of an appropriate and methodologically robust counterfactual would be achievable given the wealth of personal and socioeconomic characteristics (prior to potential participation in the programme) collected as part of these longitudinal surveys.

One of the benefits of the MCS and LSYPE2 is that their waves are timed conveniently around the potential age for participation in the NCS. Therefore, information collected in two waves of these surveys would relate to the 'before' and 'after' periods in terms of the NCS. Following the construction of NCS and counterfactual groups, a difference-in-difference approach can be used to identify the differential impact of the NCS on the long-term outcomes of interest. Annex 5 lists the questions from each survey that can be used to identify each outcome of interest.

In addition to the core considerations, this approach would allow for further merging into a wide (and expanding) range of administrative data (e.g. LEO), and would also allow for resources to be spent on understanding a range of other possible impacts (such as interaction with the criminal justice system). If this option is considered, e.g. given the fact that the LSYPE2 sample is drawn from the National Pupil Database, this allows for a 'spine' of data to be created. In other words, subject to the relevant permissions, this information could be matched (assuming that consents are in place) to a range of data sources covering benefit dependency, earnings, employment and potentially interaction with the criminal justice system. Furthermore, the **very long-term** labour market outcomes could be readily identified on an ongoing basis as new information becomes available.

3.3.2 Evaluation of outcomes under Option 4

For **each long-term outcome**, Table 8 below summarises:

- whether a robust **long-term impact measure** can be obtained using the MCS and LSYPE2 respectively; and

⁴¹ For further information please see <https://www.cls.ioe.ac.uk/page.aspx?siteid=851>

⁴² <https://discover.ukdataservice.ac.uk/series/?sn=2000110>

- whether **value for money methodology** exists that can be reasonably and feasibly applied to the long-term indicator, based on the literature review performed as part of the feasibility study (Annex 4).

This option would provide researchers with the ability to identify the impact associated with several of the outcome measures (between 4 and 8), and subject to a number of methodological caveats, monetised outcomes (between 1 and 3).

Table 8 To what extent can outcomes be evaluated under Option 4?

Long-term outcome	MCS		LSYPE2	
	Long-term impact measure	VfM estimate	Long-term impact measure	VfM estimate
SM2: Higher educational outcomes	✓	✓	✓	✓
SM3a: Leave the programme with the confidence to make the most of opportunities that present themselves	✓	✓	✓	✓
SM3b: Leave the programme with the connections to make the most of opportunities that present themselves	✓	✗	✓	✗
SM3c: Leave the programme with the attributes to make the most of opportunities that present themselves	✗	✗	✗	✗
CE3: YP go on to get more involved in (non-political) activities that benefit others – e.g. volunteering	✗	✗	✓	✗
CE4: YP go on to get more involved in the political process and contribute their insights to the public debate	✗	✗	✓	✗
SC1: YP go on to form broader social networks ⁴³	✓	✗	✗	✗
SC4: YP go on to have higher levels of social trust	✓	✓	✗	✗
SC3: YP feel a greater sense of belonging in the future	✗	✗	✓	✗

Note: ✓ = “good standard”; ✓ = “fair standard” with some caveats; ✗ = “not achievable”

Annex 6 provides further details for each long-term outcome on how exactly the impact measure could be constructed under teach evaluation option, and how the outcome can be monetised.

3.3.3 Challenges associated with Option 4

This section discusses in further detail each of the challenges associated with Option 4 previously summarised in Table 5.

Small sample size

The number of NCS participants contained within these external longitudinal studies will be fairly low. Currently, it is estimated that approximately 1,000 NCS participants can be identified in LSYPE2 (Our Future) to begin with, however the actual sample size will be lower than that by the time of a follow-up survey (c. 500 participants for a LSYPE2 age 25 follow-up and c. 800 for the MCS).⁴⁴

Uncertainty of the continuity of external datasets

⁴³ The impact of the NCS on social network breadth can be assessed, but monetisation would be difficult as this notion overlaps with several of the other outcomes. There would be a level of overlap with SM3b.

⁴⁴ For this sample size, the real impact would likely need to be in excess of 10 percentage points in order to be detected with a statistical significance.

Currently, it seems unlikely that an age 25 follow up of LYSPE2 will take place (as occurred in respect of the previous iteration of LYSPE), and if a further follow-up does take place, what questions will be included in the survey. Therefore, consideration might be given to DCMS part-funding the age 25 follow-up - which would increase the cost of this option - as an alternative to commissioning a bespoke survey. However, even without a follow-up survey, there is still **significant benefit** to policy makers and researchers from initiating the process of identification of NCS participants in these surveys – both for more general NCS research and also for the wider research community using LSYPE2.⁴⁵

Applicability of survey questions

Note that the approach here is to include a specific NCS participation question on the relevant questionnaires and undertake any analysis of long-term outcomes associated with the NCS based on the pre-existing questions contained within the surveys. The questions that are asked *touch* upon a number (although not all) of the different areas of interest; however, unlike the bespoke survey, this reliance means that the questions used as part of any subsequent analysis cannot be structured in such a way to *exactly* match up with the wider economic and value for money evidence. Therefore, some assumptions would need to be made when ‘translating’ information from the longitudinal surveys to the wider economic literature. Annex 6 provides detailed information on the approach to undertaking a value for money assessment and the nature of the information used in the wider economic literature⁴⁶.

Inter-departmental barriers

This approach is very cost effective⁴⁷; however, any attempt to use these datasets would require the data owners’ permission to identify NCS participants within the respective study, which would be achieved through the inclusion of a new question on the next wave of the external cohort study. This is by no means guaranteed, and could require significant lead time to accomplish.

For previous waves of the MCS, the questionnaire development and piloting has required an extensive lead consultation period, as much as three years in advance of the next wave. With the next MCS wave being conducted in 2018, the consultation period for the wave after could begin within the next 12 months. For LSPYE2, the survey questionnaire is typically finalised in late summer/ early autumn each year for piloting around November/December of the same year. In either case, it is advisable that DCMS begin discussions with the Centre for Longitudinal Studies (regarding the MCS path) and the Department for Education (regarding the LSPYE2 path) as soon as possible, in order to maximise the chances of being able to include a question to identify NCS participants.

Consent and the GDPR

As with Option 3, there are a number of consents that would need to be put in place to allow for linking to other data sets. More specifically, NCS participants would have to knowingly consent to be identified in external datasets

The GDPR will also have implications and pose further challenges for this research option. In particular, **consent obtained for data linkage will need to be clear and unambiguous**. It will be necessary to make it clear to respondents what administrative records their survey data will be

⁴⁵ The relatively low NCS participants sample size should still be noted but is not necessarily a constraint for wider research.

⁴⁶ Note also that a number of assumption would need to be made about the comparability of the value for money estimates identified in the wider economic literature and their applicability to the NCS. In particular, a number of studies in the wider economic literature might be based on data from different countries, different groups of individuals and different timeframes, which have limited applicability to the cohort of NCS participants.

⁴⁷ Unless a follow-up LSPYE2 wave has to be sponsored by DCMS

linked to and for how long the data linkage might continue. The time period is important as DCMS/ NCS Trust may be asking respondents for permission to link their data many years in the future once higher education and employment outcomes become available. It should be recognised that consent rates for data linkage may well decline as GDPR starts to apply. Equally, GDPR will determine whether or not an age 25 follow-up wave could be conducted and potentially guide the necessary permissions that would need to be collected.

3.3.4 Sub-options

The main variations of this option relate to the uncertainty whether an age 25 LSYPE2 follow-up survey would be commissioned by the Department for Education. If a follow-up would be commissioned, this would keep the cost of this option lower. However, if DCMS part-funds or fully funds an age 25 follow-up, the cost of the option might reach £1.5 - £2 million.

4 Conclusions

4.1 What can be achieved by summer 2019?

A detailed examination of the **consents** provided by respondents to previous NCS evaluations suggests that following-up on respondents from earlier short-term evaluations is **not feasible** because these re-contact permissions do not allow for this. As such, there are two core options available in the short term:

- **Option 1** involving a **one-off survey** of NCS participants and individuals that expressed an interest but did not participate, drawn from NCST management information (Salesforce)⁴⁸
- **Option 2** involving the **linking** respondents from the 2013/14 short term evaluation to existing databases (such as the **Longitudinal Education Outcomes** (LEO) database)

There are some **very severe methodological challenges** associated with Option 1. In particular, although all outcome measures could be assessed, the analysis would be based on the assumption that both the personal and socio-economic characteristics of the two groups are similar enough for comparison in terms of unobservable characteristics, but also that the baseline measures for the outcomes under consideration are comparable. Without a baseline measure for respondents, it is very unlikely that any analysis could fully control for the important systematic differences between the two groups. Furthermore, from a practical perspective, contacting and surveying a sample 5 years post completion (or expressing an interest in a programme that they did not participate in) would offer a significant challenge to researchers to develop the necessary large sample size, and result in a substantial cost with limited benefit.

In relation to Option 2, the primary issue relates to the **limited range of outcome measures** that might be considered. In particular, only participation in publicly funded further education and training and/or higher education participation might be considered, and this limits the usefulness of the option. Further issues relate to possible **regulatory challenges** (i.e. consent to link) and **practical challenges** (i.e. limited information to achieve a sufficiently robust match) associated with the linking of NCST data to Department for Education Longitudinal Education Outcomes data.

4.2 What can be achieved with no immediate time constraint?

Looking at the feasibility of undertaking a long-term evaluation with no time-constraints, there are again two possibilities worth considering, which are **not mutually exclusive** and can be undertaken in parallel:

- **Option 3** involving a **bespoke survey** administered on a sample of NCS participants (the treatment group) and on a comparable sample drawn from the **National Pupil Database** (NPD) to form the counterfactual. The survey would be **longitudinal**: the first wave administered when embarking on the NCS ('before'), followed by at least one 'after' survey (e.g. 5-year follow-up).
- **Option 4** involving the **identification of NCS participants in existing external longitudinal surveys** that provide sufficient data for the assessment of NCS long-term outcomes, such as **Our Future** (LSYPE2) or the **Millennium Cohort Study** (MCS). This would allow the

⁴⁸ It is the researchers view that currently, the consent collected from 2013/14 NCS participants allows for re-contact. However, DCMS and NCS Trust might need to seek council on how they can process these records within GDPR.

construction of a treatment group, with the **counterfactual** created using a group of non-participants found in that same particular dataset (selected based on observable characteristics similar to those of the NCS participants).

Although both of these options would provide a superior methodology for the evaluation of the long-term outcomes associated with the National Citizen Service compared to the summer 2019 options, **neither is without challenges**. A summary of the strengths and weaknesses associated with each of the options is presented below.

Option 3 (i.e. creating a bespoke NCS longitudinal survey) would provide the greatest flexibility, since it allows the (current or new) survey questionnaire to be straightforwardly **amended** or **tailored specifically to the objectives of the long-term evaluation**, allowing to potentially identify impact and assign monetised benefits to **most of the outcomes of interest**. However, this option would also be **costly**, as a large sample will need to be drawn and tracked over time, and even with a large sample size achieved, there is a **risk** (as with any other evaluation) that the long-term outcomes associated with the programme might not be **identified** even if relatively large. Finally, there are some **regulatory burdens** to overcome and ethical considerations to make. To undertake this analysis in time for the 2018 baseline survey to be redesigned and administered would require the agreement of other government departments (Department for Education) to use the National Pupil Database.

Option 4 (i.e. involving the **identification of NCS participants in existing external longitudinal surveys**) would provide researchers with the ability to identify the impact associated with only several of the outcome measures (between 4 and 8), and subject to a number of **methodological caveats**, monetised outcomes (between 1 and 3). **This approach is relatively cost effective** and as an additional benefit, this option allows for a 'spine' of data to be created linking to additional external data sources and therefore allowing for additional outcomes to be tracked. However, any attempt to use these datasets would require the data owners' **permission** to identify NCS participants within the study and the **number of NCS participants contained within these external longitudinal studies will be fairly low**.

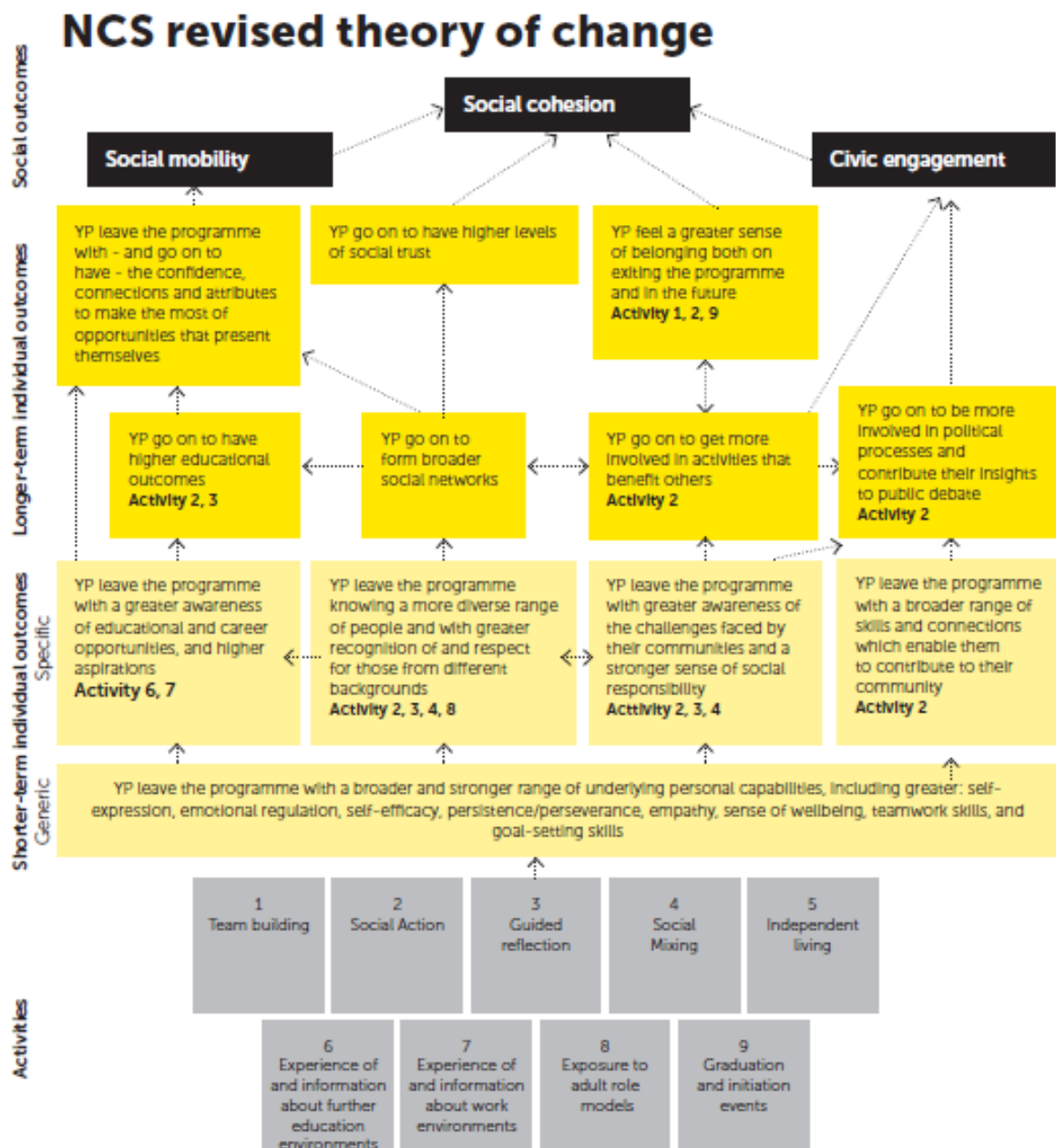
There is generally a **trade-off** associated with the different options in terms of the cost to undertake any potential analysis and the evaluation outcomes that might be achieved. Moreover, in this case, significant additional resources (aimed at a bespoke longitudinal survey as in Option 3 for instance) would substantially reduce the risk - but not necessarily provide any guarantee of being adequately able to identify the long term impacts of the programme. In contrast, some of the relatively inexpensive options – using existing longitudinal and administrative data sets might provide some solutions – but would be inherently more limited in terms of the understanding the breadth of the long-term objectives of the programme.

However, it is also worth noting that the repeated short-term evaluations have identified consistent impacts across a range of measures, and there may be some benefit in spacing the short-term evaluations so that they occur every other year, and use this freed-up resource to focus on long-term evaluation.

ANNEXES

Annex 1 Theory of Change

The first stage NCS theory of change was developed with support from service design specialists Shift, and drew on three main data sources. First, a review of existing NCS literature, including mission documentation and evaluation material, with a focus on highlighting the programme’s desired outcomes. Second, a review of external literature, including theoretical papers, systematic reviews, evaluation reports and grey literature. Third, consultation with NCS stakeholders, including NCS Trust senior leadership and staff from a range of departments, regional delivery partners and local delivery partners, and group discussions with a sample of NCS graduates (Panayiotou et.al, 2017).



Annex 2 National Citizen Service narrative

A2.1 Methodology

As part of the study, a consultation with Shift and senior NCS Trust operatives was undertaken in order to better understand the evolution of the NCS programme and its objectives, and how it is intended to achieve these objectives.

In September 2017 the NCS long-term feasibility research team had a face-to-face discussion with representatives from Shift, a social enterprise that has been working with NCS Trust to develop the programme's Theory of Change⁴⁹. The team also had a face-to-face discussion with three members of staff at NCS Trust in November 2017.

This document reports discussions from these meetings, as well as other published information about the programme⁵⁰. Wherever possible this note uses published facts about NCS, although where stated, the commentary includes opinions from those interviewed.

It is important to note that these interview comments are not the official position of the NCS Trust nor do they represent NCS Trust policy in the past or in the future. These comments are the personal reflections of those individuals interviewed.

A2.2 Growth over time

The National Citizen Service (NCS) was introduced by the Conservative and Liberal Democrat Coalition government (2010-2015) to help build a more responsible, cohesive and engaged society. Since its inception, NCS has aimed to be a rite of passage for young people, and in 2017 it remains the government's flagship programme for 15 to 17 year olds.

The Cabinet Office managed NCS pilots in 2011 and 2012, before rolling out the programme in 2013. In 2013, the Cabinet Office established the NCS Trust, a Community Interest Company, which has managed NCS since November 2013. As part of machinery of government changes in summer 2016, responsibility for NCS was moved to the Department for Culture, Media & Sport, now the Department for Digital, Culture, Media & Sport.

The Cabinet Office first piloted NCS in Summer 2011, when it was delivered by 12 providers. In 2012, the Cabinet Office piloted both a Summer and Autumn NCS programme, and the number of providers increased to 29⁵¹. In 2013, the Cabinet Office expanded NCS to include a Spring programme and new test models to assess different models of delivery. Since 2013, NCS has been delivered in Spring, Summer and Autumn, with additional test models to enable NCS Trust to continually innovate and improve the programme.

Since 2015, NCS has been delivered by 10 regional delivery partners and over 200 local delivery partners. As shown in Table 1, overleaf, the number of participants in NCS has increased each year, with over 90,000 young people taking part in the programme in 2016.

⁴⁹ <http://shiftdesign.org.uk/portfolio/national-citizenship-service/>

⁵⁰ Natcen, The Office for Public Management, and New Philanthropy Capital evaluated the 2011 and 2012 NCS pilots:

http://www.ncsy.es.co.uk/sites/all/themes/ncs/pdf/ncs_2011_one_year_on_study.pdf

http://natcen.ac.uk/media/205475/ncs_evaluation_report_2012_combined.pdf

The evaluations were conducted by Ipsos MORI in 2013, 2014 and 2015:

http://www.ncsy.es.co.uk/sites/all/themes/ncs/pdf/ncs_2013_evaluation_report_final.pdf

<https://www.ipsos.com/sites/default/files/publication/1970-01/sri-ncs-2014-evaluation.pdf>

<http://www.ncsy.es.co.uk/sites/default/files/NCS%202015%20Evaluation%20Report%20FINAL.pdf>

Kantar Public and London Economics conducted the evaluations in 2016 and 2017 (publication forthcoming).

⁵¹ Twenty-three of these providers delivered both a summer and autumn programme; and six just delivered a summer programme.

Table 9 NCS participant numbers⁵²

Year	2011	2012	2013	2014	2015	2016
Summer	c.8,500	22,132	31,738	42,510	59,471	72,889
Autumn	N/A	3,871	7,828	10,913	11,453	16,194
Spring	N/A	N/A	428	4,366	4,671	3,632
Total	c.8,500	26,003	39,566	57,789	75,595	92,715

Source: past NCS short-term evaluation studies

A2.3 Evolution of NCS aims

Ahead of the first pilots, the Cabinet Office worked with the 2011 evaluation team to develop a logic model for NCS, identifying the programme's intended outcomes and long-term social aims⁵³. The 2011 Theory of Change identified three core aims, listed below:

- a more **responsible** society in which young people reflect on the responsibilities that come with being an adult citizen of this country
- a more **cohesive** society in which people from different social backgrounds, faith and ethnicity are better integrated
- a more **engaged** society in which people are more engaged in social action to tackle problems in their own communities

Annex 1 contains the programme's current Theory of Change. Elements of the NCS Theory of Change have evolved since the first programme pilots, and following work by NCS Trust and Shift in 2017, one of the overall social objectives has been re-articulated. The three current social objectives of NCS are:

- **social cohesion:** a country in which all young people feel a sense of belonging, based on trust and respect, as well as a sense of shared endeavour
- **social mobility:** a society in which young people from all backgrounds have the capabilities and connections to take advantage of evolving opportunities, and fulfil their potential
- **social engagement:** a society in which young people have the awareness, skills and drive to serve and help shape the world around them

As shown in Annex 1, social engagement and social mobility feed into social cohesion. The Theory of Change identifies nine core NCS activities. Through these activities NCS participants develop a range of personal capabilities that help them to develop a range of shorter- and longer-term individual outcomes.

From the outset, NCS has been independently evaluated using the programme's logic model / Theory of Change as the basis for an assessment framework. The redeveloped 2017 NCS Theory of Change was used to identify additional outcome measures in the 2017 NCS evaluation⁵⁴, particularly those based on the generic personal capabilities that underpin the programmes'

⁵² Participant numbers are for all who started on NCS and includes drop-outs, typically less than 10% in summer; around 15% or less in autumn; and between 80% and 90% in spring.

⁵³ <https://natcen.ac.uk/media/24899/ncs-evaluation-interim-report.pdf>

⁵⁴ Publication of the 2017 summer and autumn programmes will be in late 2018.

intended short-term individual outcomes. However, the outcome measures used in the earlier evaluations remain relevant and the majority were retained for the 2017 evaluation⁵⁵.

As the government and NCS Trust's understanding of NCS' impact continues to develop, it is quite possible that additional outcome measures will be identified in future. However, broadly speaking, the programme's aims and intended outcomes have remained consistent over time. The NCS Trust staff interviewed also felt the programme's structure and objectives were likely to remain relatively unchanged in the future. Therefore, current and some of the previous outcomes are likely to remain appropriate as a benchmark for long-term measurement.

A2.4 Evolution of NCS delivery

In terms of the broad model of delivery, NCS remains consistent with the 2011/12 early pilots. NCS participants continue to be grouped into teams of around 12 to 16. Following induction activities, the programme still starts with a residential largely consisting of outdoor activities (**Adventure**), followed by a residential that focuses on building skills and community links (**Discovery**). NCS participants then plan and deliver a social action project in their local community (**Action**).

The **Challenge**⁵⁶ was one of the leading instigators of the first NCS pilots, which built on an earlier Challenge social action model in London that aimed to encourage social cohesion. The Challenge currently delivers approximately 40% of NCS; around 70-80% of which they deliver directly, using a consistent 'Challenge curriculum'. The remaining 60% of local delivery providers vary in size. As with The Challenge, they all conform to the NCS programme of delivery. At the same time, each has its own characteristics and provides specific NCS components that work well with the scale of their own provision.

Since its roll-out in 2013, the independent NCS evaluations have treated NCS as one, consistent programme. This fits with the need for delivery partners to conform to the NCS programme of delivery, and there being a single Theory of Change for the programme. It has also been a pragmatic decision: firstly, detailed information on how specific components of the programme vary has not been available to enable appropriate operational sub-groupings; secondly, even if that operational data have been available, survey sample sizes would have made meaningful and defensible sub-group analysis impossible. However, as noted above, since the start of NCS, there has been some variation within the consistent overall NCS programme, particularly in the Discovery and Action phases. For example, the specific activities during the 'building skills' residential varies from one provider to the next; as does the level of choice or direction provided in the social action phase. Ultimately, there is not one identical NCS itinerary for every young person who takes part.

The NCS staff interviewed in the exploratory phase of research anticipated that NCS is likely to continue with a large mix and volume of providers. This was perceived to be a positive feature of the programme, as it allows providers both to deliver NCS in a way that best fits their skills, and encourages innovation. Therefore some variation within NCS should be acknowledged and accepted, particularly at the activity level. As all programmes conform to a consistent NCS programme, arguably this should not lead to differential programme impact; however, to date, there has not been sufficient work to identify if this is the case (work is planned by NCS Trust to identify and understand this variation).

Thinking about next steps, the NCS Trust staff interviewed said work is currently being conducted to explore how they may develop the current approach to 'Adventure', 'Discovery' and 'Action' to

⁵⁵ As small number of questions were removed to manage questionnaire length.

⁵⁶ <http://the-challenge.org/>

offer broader appeal. For example, 'Adventure' being delivered via an outdoor pursuits residential phase, may be a barrier to some young people. The Spring, Summer and Autumn programmes also tend to have a different profile of participants, and the NCS Trust is evaluating the impact and any implications of those differences. This work is being conducted alongside the Theory of Change review, with the aim of ensuring that any modifications to programme delivery support the programme's intended outcomes. A further focus is on extension activities and helping to guide young people through the available extension pathways. When thinking about the medium and longer-term impact of NCS on participants, it will be useful to identify, which if any, extension activities they took part in.

Annex 3 Team leader and NCS graduate interview summary

A3.1 Objectives

The main objective of the qualitative interviews with NCS graduates and team leaders was to explore the perceived impact of the programme across the short, medium and long-term; and to consider the wider impact of the programme on participants' friends, family, and community. All interviews used the current NCS Theory of Change included in Annex 1 as a structure for the discussion.

A3.2 Methodology

The target was to conduct five to six interviews with NCS graduates, and five to six interviews with NCS team leaders. Due to fieldwork timings, the NCS team leader interviews were all conducted by Sally Panayiotou at Kantar Public; and the NCS graduate interviews were all conducted by Alex Farrow at NCVO. Interviews were semi-structured and followed guides agreed with DCMS and NCS Trust, but allowed for flexibility and follow-up questions depending on individuals' responses.

A3.3 Team leaders

Kantar Public worked with the NCS Trust to create the sample frame for qualitative interviews with current and previous team leaders. The NCS Trust first contacted prime organisations across the network and asked if they would be happy for them to send their contact details to Kantar Public. They included a letter informing team leaders about the research, to give them an overview of what the research involved. The NCS Trust then sent Kantar Public the names and email addresses of the individuals at prime organisations who had given permission for Kantar Public to contact them directly.

Kantar Public emailed each contact, explaining the research and asking them to randomly identify four to six team leaders in each area who would be happy for their details to be passed on to Kantar Public. Prime organisations were asked to include a mix of potential respondents (by gender, age, whether the individual was an NCS graduate or not, and whether they were sessional/seasonal employees or employed on a permanent contract). Prime organisations were given an Excel spreadsheet to populate, which included these criteria as the column headings. The spreadsheet also included a column asking providers to confirm that each individual had given their permission for their contact details to be passed on to Kantar Public.

All personal details were sent securely via Accellion.

Within the fieldwork period:

- Four prime organisations provided details of between 4 and 16 team leaders who had given permission for Kantar Public to contact them to invite them to take part
- Details of 26 team leaders were provided in total

Kantar Public selected a purposive qualitative sample of six team leaders, ensuring where possible a spread of the different criteria, and emailed them to explain the research and ask if they would be willing to take part in a telephone interview. Of these, two agreed to take part in an interview. Kantar Public then contacted a further six team leaders. Of these, four agreed to take part in an interview; however, one participant later dropped-out due to lack of availability.

Kantar Public conducted five interviews with team leaders between November 6th and November 9th 2017. The team leaders interviewed were aged between 21 and 26. One team leader said they had previously taken part in NCS, although this was prior to the programme roll-out in 2013 so would have either been an early pilot, or a predecessor to the programme following a similar format. Each interview was conducted over the telephone and lasted around 45 minutes.

All participants in the research were emailed an Amazon voucher code for £20 by Kantar Public as a thank you for taking part.

A3.4 NCS graduates

NCS Trust supplied a list of names and email addresses for 10 NCS graduates, who were accessed by the NCS Trust graduate manager through a graduate booking form. This is a list of NCS graduates who have given their permission to be contacted after finishing the programme. Kantar Public securely sent this list of contacts to NCVO, who emailed 10 NCS graduates, six of whom agreed to take part in the research. The sample included potential participants demonstrating a mix of age, gender, year of first NCS involvement, season of the programme participation, and region.

NCVO conducted six interviews with NCS graduates between November 17th and November 29th. Each interview was conducted over the telephone and lasted around one hour.

The NCS graduates interviewed were aged between 18 and 20, and their first interactions with NCS were between 2014 and 2016. All were actively involved with the NCS Trust and/or their regional NCS provider in a variety of ways, including volunteering on future NCS programmes, interning at the NCS Trust, being a NCS staff member (in the regional provider), attending high-profile events, and undertaking promotional activities for NCS recruitment.

All participants in the research were emailed an Amazon voucher code for £20 by Kantar Public as a thank you for taking part.

A3.5 Caveats

This was a very small sample of just five qualitative team leader interviews and six NCS graduates. The findings from this research should not be seen as being representative of the total population of team leaders or NCS graduates.

While prime organisations were requested to randomly select a good spread of team leaders to build the sample frame; and Kantar Public randomly selected participants to invite to take part, there is unknown bias in the sample. For example, prime organisations may have selected team leaders who are more positive about NCS, or those who were convenient to ask. Similarly, more enthusiastic team leaders may have been more inclined to agree to pass on their details / take part in an interview. All the team leaders interviewed were extremely positive about their experience, but it is possible that with a larger sample, and an alternative sampling methodology, there would also have been team leaders who have had a less positive experience.

While this was not part of the sampling criteria, during the interviews it transpired that all the NCS graduates had taken part in NCS extension activities following their NCS graduation. While these were positive examples of how young people have engaged in the full range of NCS activities, it is not representative of the wider NCS population.

Quotes from the interviews are used in this document to illustrate particular points. These quotes are the opinions of the individual interviewed. The quotes do not necessarily reflect the views of everyone interviewed (although as previously noted, all participants in the research were highly

positive about their experience) nor do they represent the past, current or future policy of the NCS Trust. 'TL' denotes a team leader interview and 'G' an NCS graduate interview, with the following number identifying the person interviewed. For example, TL1 was a comment made by the first team leader interviewed.

A3.6 Summary of findings

A3.6.1 Team leaders overview

To date, the independent evaluations of NCS have focused on NCS participants. This small qualitative sample of team leader interviews suggests that the programme's positive impacts also have relevance for team leaders. This would require further exploration with a larger, unbiased sample, but at this stage it seems likely that with a robust methodology including an appropriate counterfactual, it would be possible to identify positive impacts of NCS on team leaders.

- Many aspects of the Theory of Change were relevant for team leaders, therefore it may be appropriate to draw on the same outcome framework for assessment (substituting educational outcomes with work-related outcomes)
- Thinking about the personal capabilities, they could all see how being an NCS team leader had helped them develop their emotional regulation, persistence / perseverance, empathy and goal setting skills
- The team leaders could see how NCS helps participants with self-expression / self-efficacy, but felt these were less relevant to them as they started as very confident individuals
- All felt they were happy before NCS, but also loved their jobs, so while they couldn't see the direct impact of NCS on their wellbeing, they were happy and fulfilled

A3.6.2 NCS graduates overview

The NCS graduates interviewed were still taking part in NCS extension activities and very engaged with the programme. They now attributed more of the positive impacts to their *Leaders' Week*⁵⁷, rather than NCS itself, although it was evident their initial NCS gave them the confidence to continue to NCS Leaders' Week. As such, their personal capabilities and attitudes have evolved over a much longer, ongoing NCS journey. The short length of time since graduation (one to three years) and the fact that these were still young people living between university and home, made it difficult for them to reflect on the longer term impact of NCS – suggesting that evaluation outcomes after completion of the NCS programme (for instance after only three years) might not be appropriate, and that a slightly longer timeframe might be warranted.

⁵⁷ Leaders' week is an intensive, week-long residential programme for the most engaged and enthusiastic NCS graduates to continue their NCS journey by developing leadership skills and further realising their potential. It brings together 3 Regional Youth Board members from every NCS region who have excelled as advocates over the past year. These young people take part in an intensive leadership programme to support them to step up and become national advocates. Over five days they share their regional best practice, develop their leadership skills and receive PR and media training. They leave prepared to represent NCS nationally and ready to guide and mentor future RYB members.

NCS social objectives: Team leaders and NCS graduates**Social cohesion**

- All participants had sustained friendships and talked about being friends with people they wouldn't have been friends with otherwise, particularly in terms of age, ethnicity and advantage
- The NCS graduates particularly appreciated the geographical diversity of their Leaders Week and spending time with people from completely different regions. This was an important element of social mixing for them
- There was a strong sense of belonging to NCS
- Team leaders also now felt a stronger tie to their community – although many were working in community-based roles in addition to being an NCS team leader
- The NCS graduates were at a transient stage of life, living between home and university, and their ties to their local community were less strong. At this stage in their lives (one to three years after graduation), they struggled to reflect on their relationship with their 'local community'.

Social engagement

- All participants in the research felt NCS made them a lot more aware of social issues, and exposed them to more opportunities
- All the team leaders had a history of community engagement and had participated in formal and informal volunteering prior to working on the programme. Only one of the five was currently volunteering outside of work. This may partly be as they were now in community-related professional roles where they feel they already contribute significantly to wider society
- The NCS graduates were looking at community / teaching careers after university. One was volunteering with their family, although this was something the family had done before participation in the NCS

Social mobility

- The team leaders had all already been to university so some of the social mobility impacts felt less relevant
- Team leaders felt NCS had helped them to develop their skills, which helped them to get jobs – and helped a couple of these participants to identify their current career of working with young people. However, these were all very confident, motivated and intelligent individuals, who arguably would have been highly employable in the absence of NCS
- While NCS was not felt to have changed their immediate education routes for five of the NCS graduates, one graduate said that NCS had helped them to identify university as an option. For this individual the social mixing played an important role and realising that as they had things in common with someone from a more affluent background, and there was no reason why their choices (i.e. higher education) should not also be relevant. The positive adult role models were also important.
- All the NCS graduates felt NCS had helped them demonstrate to their parents that they were ready for university and independent living

A3.7 Implications for Theory of Change

The research team has been conscious of the recent work conducted on the Theory of Change, and that NCS Trust is developing the programme in consideration of the Theory of Change. Therefore care has been taken to avoid suggesting unnecessary modifications. Suggestions are summarised below:

YP leave the programme with greater awareness of the challenges faced by their communities and a stronger sense of social responsibility
Activity 2, 3, 4

- Consider separating out ‘stronger sense of social responsibility’ from ‘greater awareness of the challenges’, to make the social responsibility outcome more distinct to articulate and measure
- Consider social responsibility as a social objective
- Social mixing (Activity 4) also contributes to shorter-term outcome “YP leave the programme with a greater awareness of educational and career opportunities and higher aspirations” as it plays a significant role in developing self-belief and self-esteem

A3.7.1 Team leaders

Caution should be taken over making generalisations based on such a small sample; however, it does feel as if the existing Theory of Change could be slightly adapted to work better for team leaders. As their starting point is one of greater maturity and confidence, some of the personal capabilities and educational outcomes are less relevant, although interviewees agreed that the majority of the outcomes identified in the Theory of Change were relevant to them.

Exploring how NCS contributes to team leaders’ future careers would be interesting; not simply how it aids their employability, but possibly in terms of finding a ‘vocation’ (i.e. a career they feel passionate about rather than a ‘job’ and how that relates to future wellbeing). The interrelationship between community engagement and professional lives is also interesting, particularly how this ties in with their sense of belonging to a community and society more broadly over time.

A3.7.2 NCS graduates

The furthest an NCS graduate was from participating in their first NCS programme was three years and with the relationship ongoing, NCS graduates found it difficult to perceive how the programme had impacted them beyond the short or medium term. This has limited the extent to which it is possible to project how pertinent the outcomes will be over the longer term. With this particular group of research participants, there is a clear logic for how NCS could continue to have positive impact and recognise its longer-term objectives, although these were particularly engaged young people.

These interviews suggest that one to three years on from graduating is the short, to medium-term, but have not given a clear guide on how to define “long-term”. It is possible longer term will be related to life-stage, i.e. the point at which a young person leaves formal education; when they move out of the family home; if they move out of their home-town; their work and career moves etc. For example the programme logic would suggest that if a young person moves to a different area, NCS will have given them a greater awareness of their role in society, which affects their attitudes and behaviour in their new home. However it is difficult to assess this until this change happens, and these kinds of life changes will differ from person to person so the time points will not be clear cut. There may also be certain points in their lives where a person is less likely to volunteer (for example starting full-time work for the first time), which means an interview at that point would suggest there has not been an impact on their community engagement; whereas their

behaviour might be very different some years on. Ultimately this means an effective longitudinal study will monitor changes over time, understand life changes, and identify attitudes (such as social responsibility) as well as behaviour.

Related to this point, social trust was the most difficult concept for both team leaders and NCS graduates to relate to. It is worth noting that the short-term evaluations have not identified substantial impact on these measures three months after the programme⁵⁸. On the one hand, it may be that it is too short-term to see these changes yet, but it is also possible that these changes are quite difficult to measure at an individual level. The research team's sense from the interviews was that a reversal of this relationship with social responsibility may be easier to articulate and measure. In other words, rather than measuring how much trust young people have in other people (i.e. how do other people make them feel), it might be preferable to measure how they perceive they should behave towards others.

A3.8 Findings

A3.8.1 NCS experience

Team leader experience

There was a great deal of consistency in how the five team leaders interviewed summarised their NCS team leading experience. All were very positive and used words such as “fun”, “inspiring” and “rewarding” to describe being a team leader. They talked about the diversity of the role and how they really enjoyed the different elements of the programme. Team leaders also talked about how tiring (or “exhausting”) the role was. However, this was not in a negative manner, as it was the positive aspects of the role that made it tiring. Team leaders also made good friends with other staff, and talked about how the different team leaders created a sociable and supportive atmosphere.

“Everyone helps each other” TL1

All the team leaders interviewed loved their job and were proud of what NCS participants achieved. They talked about how proud they were of their NCS group and it was also clear that they were proud of themselves for playing a formative role in NCS participants' development:

“I'm proud of seeing what they [NCS participants] achieve from day one to when they graduate” TL2

“...the difference from when they first meet us on the Monday through to the end of the programme – the difference in their confidence and leadership. That's probably the best feeling you can ever have, to see their progression. That's why we do the job we do” TL4

There was also a great deal of pride in seeing how their NCS participants developed into a strong group during the programme, and the role that they played in supporting that:

“On programme you're like a little family that grows together and get close. As team leaders it's really important that young people can trust and confide in you. You find out a million and one things about them and their lives” TL3

⁵⁸ The evaluations were conducted by Ipsos MORI in 2013, 2014 and 2015:

http://www.ncsyes.co.uk/sites/all/themes/ncs/pdf/ncs_2013_evaluation_report_final.pdf

<https://www.ipsos.com/sites/default/files/publication/1970-01/sri-ncs-2014-evaluation.pdf>

<http://www.ncsyes.co.uk/sites/default/files/NCS%202015%20Evaluation%20Report%20FINAL.pdf>

Kantar Public and London Economics conducted the evaluations in 2016 and 2017 (publication forthcoming).

"If you see them on the first day - someone really doesn't want to be doing it and on the last day having the best time of their life – I've literally cried over young people before to see the change" TL5

"It's great to watch them go from nervous teenagers who don't know each other, to a tight knit group" TL2

"It's very difficult if your team isn't gelling. If they argue all the time or some people can't be bothered to do it. Usually if there's a couple of people with strong personalities they might take over or people who speak without thinking. My role as a team leader is to mediate it. They need to get on for their social action project!" TL1

Being a good team leader

All participants felt that it was important for team leaders to be *"understanding"* and *"compassionate"*, although at the same time they noted that different types of people bring different things to the role. Given the demands of the job, they need a lot of energy, although they felt that was something that they gained from their role:

"You have to be energetic: you support the young people through your own energy and also feed off their energy" TL2

"If you put everything into it, you get a lot back" TL5

They also had to be committed to their role. All the team leaders interviewed described themselves as being passionate about working with young people, although there was a mix of those who felt they already had this interest before the role, and those who felt they developed this passion through working on NCS. One team leader felt NCS had given them a passion for working with young people that was shaping her future career; while another had put their career ambitions on hold to continue working on the programme in a full time role for a couple of years to help ease himself into adult working life.

NCS graduate experience

All of the NCS graduates interviewed had participated in NCS Leaders, with a number of them perceiving that this had a greater impact on their personal development and outcomes than their initial NCS participation. However, it cannot be ruled out the relative recency of that 'leaders experience' underpinned those broader views on NCS programme impact.

This included meeting a more diverse group of people, and an increased focus on leadership skills and development. NCS had also led to further opportunities and all the graduates interviewed had gone on to participate in a range of post-NCS activities with NCS Trust and their regional providers. They felt their NCS experience had offered them a range of opportunities, activities and connections, initially within their local area, but then nationally through the range of follow-on activities that now allowed them to influence the programme across the country. As one interviewee observed:

"NCS has an ability to tailor opportunities to its graduates" G5

It is therefore important to note that all the NCS graduates interviewed were reflecting on their NCS experience across *all* of the NCS activities that that they had engaged with, which had continued well beyond the initial programme.

Some of the NCS graduates interviewed talked about how they'd initially been recommended the programme by friends who had previously participated in NCS, and all were extremely positive about their NCS experience. They found it fun and felt it has had a lasting benefit to them as an individual:

“NCS was a really important thing to do. Everything I was nervous about, didn’t come true”
G3

(On NCS Leaders) *“This atmosphere, you couldn’t get anywhere else”* G2

Similar to the team leaders interviewed, the NCS graduates talked about the positive symbiotic relationship between different people on the programme and all felt they had gained a great deal:

“The atmosphere is exciting and contagious” G6

“Young people become inspired – and are inspiring” G5

A3.9 Assessing the Theory of Change

During the interview, Kantar Public and NCVO talked through the different outcomes identified for NCS participants in the Theory of Change (see Appendix 1), and asked team leaders and NCS graduates to consider how relevant these were for them personally. Team leaders were asked to think about how they might build on the Theory of Change to think about the impact of NCS on them as a team leader. Both team leaders and NCS graduates were asked to think about any other impacts NCS has had on them, and on their friends and family, and the longer-term impacts of the programme.

This section starts by looking at the **personal capabilities** that underpin the programme’s impacts, and is then organised by the three social objectives:

- **Social engagement:** A society in which young people have the awareness, skills and drive to serve and help shape the world around them
- **Social cohesion:** A country in which all young people feel a sense of belonging, based on trust and respect, as well as a sense of shared endeavour
- **Social mobility:** A society in which young people from all backgrounds have the capabilities and connections to take advantage of evolving opportunities, and fulfil their potential

A3.9.1 Underlying personal capabilities

Team leader discussion

Emotional regulation: Each of the team leaders felt they were already confident and motivated individuals before working on NCS; however they also felt they had grown in this respect while working on NCS. There were stresses involved in working as a team leader, particularly when they were new to the role, but all were now confident in the role.

“I’ve massively grown over the past three years in terms of delivering the programme. I was always confident with young people, but I’m now confident delivering the programme” TL4

“I’ve learnt different ways of dealing with difficult situations and become a lot more patient” TL1

They felt that being able to respond calmly was an important requirement of their role and NCS helped them to develop their skills in this respect. They were conscious that it was not helpful to get angry, and that even if they felt anxious about something (for example an adventure activity that scared them), they had to be professional and not react negatively. All felt their listening skills had developed through working on NCS, which was something some talked about having carried into their personal lives.

“If a friend is telling me about their problems I’ll listen and let them talk instead of giving advice” TL1

Self-expression / self-efficacy: These were the personal capabilities that the research participants were *least* likely to identify with. While team leaders could see how NCS helps participants to develop their self-expression, all felt that they came into the programme confident and able to reflect their own beliefs and needs. However, all felt that NCS had helped them develop their confidence and immediate career plans.

Persistence / perseverance: Team leaders could instantly see how their persistence and perseverance skills developed on NCS. This started right at the beginning of NCS where their role was to help their NCS team form as a group. Throughout NCS, there are set-backs and challenges and their job is to ensure their team doesn’t give up. However, they were not really able to give examples of how this might have helped in their life outside of NCS. To an extent this may be because all felt they were confident people before working on NCS, and had always had the mentality that they would be able to set and achieve their goals.

Empathy: Empathy was spontaneously mentioned as something that team leaders needed to be good at their job, as the role relies on thinking about the individuals within their team and helping them to get the most out of their NCS experience. Therefore, all entered NCS with a certain level of empathy. However, all felt that working on NCS had helped them to develop their listening and empathy skills, particularly as they were encountering so many people from so different backgrounds. They also have to mediate between disagreements and encourage young people to be empathetic.

“They say things you wouldn’t agree with, so you have to be diplomatic and try to understand, and get the other young people to understand” TL1

“You need to understand individual’s needs and support young people to understand their needs, making sure they know you’re someone there who can support them” TL2

Wellbeing: All the team leaders loved their job on NCS and felt very happy and positive about their lives. At the same time, all felt that they had been happy, positive people before working on NCS.

“I’m more confident, which contributes to wellbeing, but aside from that I was always fine” TL1

Teamwork skills: This was described as being an important part of their NCS team leading role and all team leaders were positive about how their teamwork skills had developed through working on NCS. Again, all felt they had been confident before working as an NCS team leader, but many talked about how they now felt much more able to work together as a team and take other people’s needs into account.

“I’ve always enjoyed working as a team and have enjoyed leading teams, although NCS taught me to be a bit more diplomatic...I now own a small business working with people and need to be able to build on different people’s skills or gently manage them without constantly looking over their shoulder” TL3

“Before I was very much boss, boss, boss, but now I incorporate other people’s views a lot more” TL5

Goal-setting skills: All felt that setting goals was an important part of NCS and therefore saw this as being important in terms of how they motivated their teams and encouraged them to be proud of what they achieved. However, it was more difficult for them to take this outside of their NCS work – perhaps as these were all highly motivated individuals already.

NCS graduate discussion

Increased confidence: All the NCS graduates felt their NCS experience had increased their self-confidence. This included specific examples such as increased confidence in public speaking, meeting new people, working as a group/team, or running a project. Confidence was at times used to describe self-esteem and self-efficacy in terms of the confidence to be themselves, to believe in their abilities, take opportunities, or pursue a particular decision such as a university course or employment.

From the initial NCS programme, one interviewee gained a:

“huge amount of confidence and self-assurance. I was told I was confident, but I didn’t feel that [before]” G6

“Even though it was in the middle of London...the staff just took a step back. You’ve got the map, you figure it out!” G2

“Before NCS, I was not confident. I wouldn’t speak to people. I would actively avoid situations where I would have to speak to people” G3

Persistence / perseverance: NCS provided the opportunity for participants to overcome small challenges, such as heights and rock climbing, which gave them a sense of achievement, greater perseverance and self-efficacy. Even though the obstacles were small, interviewees felt that they ‘add up’ and increase their ability to overcome problems in the future. On NCS, the support of other participants and staff was seen as important to help them overcome their fears.

“Even though I hated it, I knew I could get through it because I’d done it on NCS” G2

“You see yourself jumping through these hoops – rock climbing or running a successful campaign” G5

Teamwork skills: The NCS graduates felt their NCS experience as a whole had helped them to better understand how to work as part of a team, although they specifically spoke about NCS leaders, which included leadership workshops.

“You reflect on how you as a person fit into teams and groups. I’ve reflected on myself” G1

Self-expression: NCS provided opportunities for interviewees to better understand themselves. For example, one respondent observed that they were able to be more “genuine” when meeting new people and understood others better.

“When I did autumn [initial NCS programme], I was unsure of myself. [NCS has] given me the opportunity to explore myself – go about my life in a way I don’t think I would have” G1

(NCS is about) “figuring out who you are” G6

Empathy: Learning more about other people, particularly through the community-based social action project, as well as meeting new groups of young people through the programme, supported interviewees to better appreciate different perspectives and the views of others.

“You learn to empathise with them. Not a hidden part of NCS, but it is something that develops naturally” G5

“I find it easier for me to communicate because after having done the programme and worked on it, it helps me improve my pastoral skills” G3

One individual noted that NCS comes at a formative time of change for young people and that NCS had helped to “steer that change in a very positive direction” G4.

A3.9.2 Social engagement: A society in which young people have the awareness, skills and drive to serve and help shape the world around them

Team leader discussion

Each of the team leaders interviewed had been involved in volunteering during their teenage years, some quite extensively. For some a main motivation had been to build experience for their CV, while for others, it had simply been a 'part of their life' or 'just something they did'. However, aside from one team leader, they tended to not be volunteering outside of work at the current time. It was evident that they could see they were making a real difference in their professional lives and contributing to society as part of NCS, so there is perhaps less of a self-expectation that they should volunteer at this stage in their lives. There was a greater awareness of the opportunities to volunteer though.

"When I was younger I was involved in one type of volunteering, but I'm aware of a lot more opportunities now" TL3

All team leaders felt they had become more aware of issues in their local community as a result of working on NCS. Through NCS, The team leaders interviewed had been exposed to a range of charities working in areas that were new to them such as dementia, mental health, safeguarding, domestic abuse and disability.

"As a team leader, when you're working with a group they're looking into new things. By default I've learnt a lot of information about what they've found out" TL2

"When you start the project we usually sit around and talk about the things that they'd like to change in their community. It made me think about the things I'd like to change." TL1

Working with young people also made some team leaders more aware of negative perceptions towards young people and the challenges they face in their communities. For example one team leader working in a rural area felt that there was little for young people to do and they were viewed with suspicion by older generations, even while working on their NCS social action project for the community. Another felt that there was a lack of community spirit. More positively, some team leaders felt they gained a valuable perspective by seeing issues from young people's points of view, and this has reinvigorated issues for them.

"Today, society can feel like a scary place for young people. That's why they hide behind their phones. Our role on NCS is to help make them feel safe and explore where they live." TL4

"NCS has had a big impact. It's made me look at young people differently. I've realised they don't get the credit that's often due...there's a lot of untapped potential. It's a shame when people think they really want to do something but are told that it's unrealistic...it's made me try to help young people outside of NCS" TL3

Through the programme, NCS team leaders broadened their connections with organisations and people in their local communities, as well as with other NCS staff. However, as this was expressed more in terms of their professional lives this is discussed in the social mobility section of this document.

The impact on **political engagement** was less clear to these team leaders. All felt that voting was important, but they had felt this prior to working on NCS. Some did talk about having learnt more about political processes through NCS.

NCS graduate discussion

NCS graduates felt that their social action project contributed to their understanding of their local community and the challenges faced by different groups in society. The project was useful because it increased their knowledge and equipped them with the skills needed to take action, such as planning an action, contacting charities, understanding rules and regulations, and launching a campaign.

“The charity partner is the most valuable part of the programme” G3

Many of the interviewees had continued volunteering after NCS (some with the same charity of their NCS social action project) and taken part in political activities, such as *Bite the Ballot*, political campaigning, and voting in the EU referendum. While some individuals may have already been civically minded, they felt NCS had given them the push, skills and connections to take action. For some, this had influenced their career or employment choices.

“(NCS) opened my eyes to the issues and the political process through the social action weeks” G5

The NCS social action project increased interviewees’ belief in young people and that they could make a difference to the world around them. A number of interviewees had met their MP, had been to parliament through NCS, and felt that their opinion was listened to by decision-makers. The pace of the programme and the ability to get involved with a diverse range of extension activities helped them to develop skills quickly, and NCS was seen as a catalyst for future action. It connected with their desire to be part of society and gave them the motivation and encouragement to be more active.

A3.9.3 Social cohesion: A country in which all young people feel a sense of belonging, based on trust and respect, as well as a sense of shared endeavour

Team leader discussion

All team leaders talked about having made good friends on the programme and that they had sustained friendships with people that they wouldn’t have been friends with otherwise. All talked about how their social networks had expanded and they’d got to know more students, young people, and local organisations. While they were not always able to keep in contact with NCS participants, all had maintained friendships with other NCS staff and said these were people that they would not have become friends with otherwise.

“My friends were all the same as me – everyone was going to university; everyone knew what they wanted to do. [Through NCS] I’ve made all sorts of friends that I never would have had” TL5

Through the social mixing inherent in the NCS participant groups, team leaders were given the opportunity to spend time with young people from different backgrounds to themselves. Some team leaders talked about how they found they had a lot more in common with people from different backgrounds than they would have realised, and that as a result of NCS they were better at communicating with young people from a range of different backgrounds.

“Every young person is different, with different skills and abilities. It [NCS] broadens your horizons on the way you deal with things and assess situations” TL4

Team leaders felt that although NCS staff may be very different and come from different backgrounds, NCS gives them a shared experience of people with a passion for working with young people working towards common aims. One team leader talked about how they were able to have frank conversations with people from different backgrounds.

“When I was younger I wasn’t sure about what you can and can’t say. I’ve learnt how to deal with different references to different ethnicities” TL4

However, while there was a variety of staff in different roles, there were comments about the lack of diversity amongst team leaders (all interviewed had been to university) and that it would be beneficial to encourage more diversity amongst NCS team leaders.

Team leaders struggled to identify any changes in their levels of social trust. As noted earlier, some felt that NCS had made them a lot more aware of the lack of trust that older generations have of young people. However, some did talk about increased trust in a professional capacity and relating to people in the workplace. Additionally, their own perspective on young people and their capabilities had substantially improved.

“I see people come out with amazing things. I don’t think I could have done that when I was 15. They’ve overcome some amazing battles in their life. Some things don’t faze young people. It’s quite motivational” TL5

“I’m more considerate of young people now. I don’t dismiss their problems just because they’re young” TL3

All team leaders felt a much stronger sense of belonging, both to their community and to a cohort of NCS staff.

“I love telling people what I did on the programme and all the experiences I had. I didn’t waste my summer working in retail, but have changed someone’s life” TL5

“The other month I was in Derby and I saw another NCS team doing their social action project. I didn’t know them, but straightaway I felt comfortable going over to chat to them.” TL4

“There’s a big group of you trying to do something for your community” TL1

“I live in more of a community than I’d realised. People want to help each other and support each other. I hadn’t noticed that previously” TL3

NCS graduate discussion

The NCS graduates said they had made new, long-lasting friendships through NCS. Meeting new people, including those from different parts of the country, levels of affluence, and diverse backgrounds, was seen as a strongly positive aspect of NCS. For some, it was an opportunity to meet different groups of people for the first time and gave them an understanding of how to communicate with different people. For some, in turn, this increased their sense of empathy for others.

“I never realised how many people did the programme” G3

While other youth programmes would offer an opportunity to meet new people, the informal nature of NCS was seen as a positive, including living together, supporting each other through challenges, and working on projects together. Particularly at NCS Leaders, these were more youth-led and enabled them to take more responsibility - both for the successes and for the failures.

“The ways we bonded, the activities we did, made people equal and on a journey together” G4

The NCS graduates had expanded their social networks through NCS and felt it had increased their confidence to meet new people. Some noted how useful this was when they started university. Some graduates additionally said they felt less anxious about meeting new people. The opportunity to meet people in authority, such as councillors, MPs, Ministers, heads of schools, and

public figures, had given them a “professionalism” that would be useful in the future. Interviewees knew how to behave and engage positively with individuals in a more senior position.

Although the interviews tried to explore the notion of social trust or a greater sense of belonging, interviewees often responded noting their connection to NCS as an organisation and programme; rather than to their community or country. NCS had given them a great understanding and connection to where they live; however, many of the graduates had since left their hometown for university or employment (pointing to positive social mobility). The level at which they engaged with NCS (all had completed NCS Leaders and been highly active with NCS Trust) is likely to have increased that sense of organisational belonging.

“It’s one of the first places that I belonged. That I’m supposed to be there. That I’m accepted. That I’m not an outsider” G2

A3.9.4 Social Mobility: A society in which young people from all backgrounds have the capabilities and connections to take advantage of evolving opportunities, and fulfil their potential

Team leader discussion

For some team leaders NCS was part of broader full-time responsibilities; while others had been sessional /seasonal workers. All the team leaders interviewed had been to university before working on NCS (or worked on the programme during university holidays) and had pre-existing career ambitions, although for a small number of respondents, NCS had created a passion for working with young people as a career; while for another who had already wanted to set up their own business, NCS gave them creative ideas for this business.

Team leaders felt NCS had allowed them to develop a broad range of skills that helped them either start or develop their careers.

“I was probably very motivated already, but NCS has given me ideas and increased my confidence” TL3

“NCS gave me real experience and more to talk about on job applications and at interviews. I could draw on experiences and skills that I didn’t have before” TL1

“On the programme we try to give and much opportunity to young people as possible so we have lots of organisations and universities coming in and giving talks, which got me thinking about my career and what I can do...my life and career goals have changed. Doing NCS and the feeling I get helping young people has caused a total career change” TL4

NCS was also allowing team leaders to build contacts that helped them in their jobs. One team leader was building contacts in their non-NCS work that they used during NCS; and vice versa. They felt it was helping them to build and develop relationships.

NCS graduate discussion

NCS was seen as a “door opener” to opportunities that would strengthen their skills, knowledge and experiences and provide connections that may be useful for their future. For many of those interviewed, NCS had been an important part of their personal statement for UCAS as part of their university application process. This had given them things to say and provided situational examples of their skills, knowledge or capabilities.

“I wouldn’t be at university if it wasn’t for NCS” G5

NCS had reaffirmed or changed the interviewees' career paths – both via university and through non-university routes. This included changing their choice of study and their expectations of future

employment. Because of NCS, a number of interviewees reflected that they now wanted to do a job that was socially impactful, such as working with children, in the charity sector, politics, and with vulnerable community groups.

“NCS showed me that it [former career choice] wasn’t the path for me” G4

For these NCS graduates, engagement with the NCS extension activities had increased their personal and professional networks, such as with other young people, politicians, national and local charities, and local community decision-makers. Seeing other young people succeed had increased their self-esteem and raised their aspirations as a result.

“Where I live, you’re told ‘you’re not going to get anywhere.’ You’re constantly told that we’re not going to get anywhere. NCS told you, you would” G2

It was difficult for graduates to think more long-term about how NCS had contributed to their social mobility. At this stage in their life, there were many influences on their lives – school, friends, parents, and other organisations – and interviewees found it difficult to isolate the impact of NCS on such a holistic decision. For many, the initial NCS programme was only one to two years ago and their engagement with NCS had continued or was continuing.

Annex 4 Literature review

This review builds on the framework developed in the NCS' Theory of Change developed for the NCS Trust by Shift⁵⁹ (Annex 1 Annex 1) which outlines the long-term outcomes of the programme. The aim of this review is to identify which of these long-term outcomes map effectively to outcome measures generated in past evaluations through participant surveys; which of these outcome measures can be monetised; and which key outcome measures might not be robustly monetised - either because of a lack of participant data or the absence of a sufficiently developed methodological approach. To achieve this, an extensive literature review was undertaken of both previous evaluation work relating to 'similar' youth programmes and the wider economics literature.

Previous evaluations of the NCS were based on an initial Theory of Change that focused on improving **social mixing, community involvement, teamwork, communication and leadership**, and **transition to adulthood**. Therefore, outcome measures that have been captured and evaluated in previous studies will not perfectly map to the long-term outcomes set out by Shift's more recent Theory of Change. Moreover, the earlier evaluation work mostly concentrates on short and medium-term effects of the NCS. For each long-term outcome, the review has identified whether outcome measures and value for money methodologies can be adapted from previous evaluations, and outline any gaps in the evidence. These gaps were addressed by drawing on the wider literature.

The rest of the annex, in a separate section for each long-term outcome, discusses the available literature related to the monetisation of the respective outcome.

A4.1 SM2: Higher educational outcomes

Education allows young people to develop a range of skills that fundamentally enhances productivity (Becker, 1994), and is often reflected in a higher incidence of employment and enhanced earnings (Atkinson, 2005). The most recent 2016 surveys⁶⁰ help capture the effects of the NCS on **attitudes** towards education, although the evaluation of the 2016 NCS illustrated that there was no statistically significant impact on the percentage of respondents who agreed that education was worthwhile or that studying to gain a qualification was important to them⁶¹.

The evaluation of the long-term impacts of the 2011 NCS pilot prepared by Clery et al. (2012) is an early attempt to look beyond the immediate attitudinal effect of the NCS and collect up-to-date data to revise an earlier value for money analysis.

The interim report from the evaluation of the NCS 2011 pilots monetises the programme's long-term impact on education using information collected at the end of the programme on attitudes towards education (NatCen Social Research et al., 2012). The one year on follow-up survey measures the impact of the NCS on actual **take-up** of education opportunities (rather than just attitudes towards education). For instance, the monetary value of enhanced educational attainment has been revised downwards because few of the respondents whose attitudes towards education had improved ended up actually taking up further educational opportunities⁶².

⁵⁹ <http://shiftdesign.org.uk/portfolio/national-citizenship-service/>

⁶⁰ The most recent survey is considered the most closely suited as a reference point, given the evolution of the NCS over time.

⁶¹ Q9 of the baseline summer 2016 NCS questionnaire. See Kantar Public and London Economics, (2017b) for the survey questions and Kantar Public and London Economics (2017a) for the impact results.

⁶² Instead, the value of higher education was based on the (not statistically significant) estimated impact of the programme on actual uptake of education opportunities, which was much smaller in magnitude.

Nevertheless, as argued in the report, many of the respondents – aged 15 to 17 when taking part in the NCS – were still in education and had therefore presumably already committed to a particular educational path before entering the programme. Therefore, the programme would have been unlikely to influence their decision of whether to undertake short-term educational opportunities. However, it should be noted that the NCS Trust (2015) have also produced research on how participation in the NCS affects higher education using UCAS data, which concludes that NCS graduates are 12% more likely to engage in higher education in the long term compared to non-NCS graduates.⁶³ The NCS may have had a stronger impact on the uptake of education opportunities in the more distant future, which could be captured by a longer term evaluation.

Nevertheless, the change in attitudes towards education is used as an upper-bound for measuring the benefits of education in the evaluation of the NCS 2012 (NatCen Social Research, 2013): based on research by Mcintosh (2007) and Jenkins et al. (2007), it is assumed that 3% of NCS participants – the programme’s impact on the percentage of people agreeing that education is worthwhile – would see an increase in the net present value of their lifetime earnings (by approximately 14%).

Overall, previous evaluations as well as recent literature on the returns to education (Conlon and Patrignani, 2011; Conlon et al., 2011) provide strong evidence for the monetisation of the NCS’ long-term impact on education outcomes (both in terms of higher education and vocational education routes).

A4.2 SM3: Young people leave the programme with - and go on to have - the confidence, connections and attributes to make the most of opportunities that present themselves

As presented in the Theory of Change, social mobility depends not only on education outcomes but also on **confidence**, **connections** and a range of **personal attributes** or **skills**. The 2016 questionnaires provide outcome measures for a number of attributes or skills, as well as potential proxies for confidence; however, proxies for connections remain scarce. In terms of value for money analysis, previous NCS evaluations have developed a methodology for monetising the impact of the programme on **leadership skills** based on estimates by Kuhn and Weinberger (2005).

Three questions in the current survey were identified as potential proxies for confidence to make the most of opportunities that present themselves⁶⁴. The current NCS questionnaire asks whether respondents feel able to have an impact on the world around them and how positive they feel about their chances of getting a job in the future⁶⁵. The impact of the Summer NCS 2016 on the share of positive responses to each of these questions was 17 and 6 additional percentage points respectively. Respondents are also asked to what extent they feel that the things they do in their lives are worthwhile⁶⁶. The impact of the Summer NCS 2016 on the percentage of respondents who answered “completely worthwhile” was 11 additional percentage points.

⁶³ <http://www.ncsyet.co.uk/sites/default/files/NCS%20Wellbeing%20and%20Human%20Capital%20Valuation%20-%20Jump.pdf>

⁶⁴ Questions Q5a, Q9d and Q16 of the baseline summer 2016 NCS questionnaire.

⁶⁵ These questions is mainly relevant to self-efficacy and the locus of control (individuals who feel that they have control over their lives are said to have an internal locus of control), both of which are related to the concept of confidence (see Goodman et al., 2015; Annex 1). Bandura (1997) draws a distinction between confidence and self-efficacy. He argues that confidence denotes strength of belief without specifying the object of this belief. Perceived self-efficacy, on the other hand, is described as “belief in one’s agentic capabilities that one can produce given levels of attainment”. However, in the context of the NCS, self-efficacy as defined by Bandura (1997) arguably contributes to one’s “confidence to make the most out of opportunities that present themselves”. Indeed, when discussing recommendations to help improve this outcome, the Theory of Change suggests activities geared towards improving self-efficacy.

⁶⁶ This question could be an indicator of self-esteem which in turn could be a proxy for confidence. Self-esteem captures whether one has a favourable opinion of oneself and considers oneself to be worthy (Rosenberg, 1965).

Regarding the measurement of attributes or skills, the current questionnaire asks respondents how confident they feel about different areas of life such as working with other people, leading a team, expressing ideas clearly, managing their money, and getting things done on time⁶⁷. Depending on the specific area, the impact of the Summer NCS 2016 on the additional share of respondents who felt confident about the measure in question was found to be between 9 and 25 percentage points. It should be noted, however, that the latest NCS Theory of Change distinguishes between **confidence** and attributes or **ability**. Therefore, separately identifying the NCS' impact on these outcomes would require the questionnaires to be updated in order to distinguish between confidence and actual proficiency in the said attributes.

In addition, although the 2016 surveys cover many aspects of outcome SM3, the follow-up survey may have come too early for graduates to be fully aware of the extent to which their confidence, connections and attributes have evolved. It is most likely that these will be put to test when respondents leave home or enter the job market (i.e. more than three months after the end of the programme). This could be captured in a longer term evaluation.

The following sections review additional evidence on the value of connections, attributes and confidence.

A4.2.1 SM3a: Young people leave the programme with - and go on to have - the confidence to make the most of opportunities that present themselves

The Theory of Change states the importance of confidence in leveraging skills and attributes. In addition, confidence-related attributes such as **self-esteem** can impact **mental health**, the **propensity to engage in risky behaviour**, and **criminal activity** (see Goodman et al., 2015 and London Economics, 2017).⁶⁸ London Economics (2017a) and Goodman et al. (2015) study the effect of childhood skills on adult outcomes based on the British Cohort Study (BCS70). In particular, they find that self-esteem and a range of other non-cognitive measures at age 10 are positively related to a number of both financial outcomes at the age of 34 and 42, as well as a range of health related outcomes in adulthood⁶⁹. Using the US-based National Longitudinal Survey of Youth (NLSY79), Heckman et al. (2006) find that **non-cognitive skills** positively affect hourly wage. Their measure of non-cognitive skills is a standardised average of the Rosenberg Self-Esteem Scale⁷⁰ and the Rotter Internal-External Locus of Control Scale,⁷¹ and could be considered a proxy for confidence (Goodman et al., 2015). The above results point in the same direction and can be explained by a direct effect of self-esteem on productivity, and an indirect effect on wages through schooling choices and various other life outcomes such as mental health and risky behaviour (see Goodman et al., 2015; Heckman et al., 2006). **These results could be used to monetise the impact of the NCS on confidence.**

A4.2.2 SM3b: Young people leave the programme with - and go on to have - the connections to make the most of opportunities that present themselves

The economic value of connections is most apparent when considering professional networks that can be drawn upon during potential job search.

⁶⁷ Questions Q10c-Q10g of the baseline summer 2016 NCS questionnaire.

⁶⁸ Self-esteem captures whether one has a favourable opinion of oneself and considers oneself to be worthy (Rosenberg, 1965).

⁶⁹ Self-esteem was measured through the Lawrence Self-Esteem questionnaire (Lawrence, 1981). The questions are available from: <http://www.cls.ioe.ac.uk/datadictionary/page.asp?section=000100010002000600060002§ionTitle=Section+A%3A+The+LAWSEQ+Pupil+Questionnaire&var=k017>

⁷⁰ See Rosenberg (1965).

⁷¹ Individuals who feel that they have control over their lives are said to have an internal locus of control. See Rotter (1966).

Cingano and Rosolia (2012) draw on administrative records from northern Italy to study the role of labour networks in shortening unemployment spells. They find that people with a larger **share of employed contacts** in their network find a job more quickly: a one-standard-deviation increase in the network employment rate shortens unemployment duration by approximately 8%. The authors explain that employed connections most likely have better access to information about job vacancies and are less likely to compete for opportunities circulated in the network. In terms of monetising reduced job search activity, clearly unemployment duration has an impact on lifetime income, as it determines the extent of foregone earnings between two jobs. Therefore, a way to value people's connections is through their network's employment rate⁷².

Interestingly, **network size** or total number of contacts does *not* have a statistically significant effect on unemployment duration (Cingano and Rosolia, 2012). This unexpected result suggests that, for a given network employment rate, the total number of contacts does not matter. For example, having two contacts of whom one is employed, is no different to having six contacts of whom three are employed. This is striking as one might assume that a higher number of employed contacts would provide one with more job-relevant information. Furthermore, emphasising the network employment rate as opposed to the total number of employed contacts implies that individuals would be better off if they mixed with individuals who are more integrated into the labour market (i.e. the quality of the network matters). However, this would clearly conflict with the NCS objective of broadening social networks (SC1). However, from the perspective of young people who come from a high-unemployment background, meeting friends who are more likely to be employed would actually increase the socio-economic diversity of their network.

Cingano and Rosolia (2012) have several explanations for their finding, including measurement error of the network size. After accounting for possible measurement error, they find a statistically significant relationship between network size and unemployment duration. In other words, having more contacts *might* also help shorten one's unemployment duration without necessarily worsening the diversity of one's social network.

Other studies have also investigated the relationship between using 'connections' and employment outcomes, but are less applicable to the NCS value for money analysis. For instance, Holzer (1988) explores the relationship between the use of various job search methods and the probability of receiving a job offer. Of all the methods considered, it was found that searching through friends or relatives had the largest positive impact on the probability of receiving a job offer. However, the author does not provide sufficient information to allow for the results to be translated into a value for money analysis.⁷³

Simon and Warner (1992) study the impact of **job-search method** on starting salary and subsequent wage growth. They find that referred workers earn higher starting salaries but experience lower wage growth. They argue that employers possess better information on referred workers, thereby allowing them to pay higher starting salaries, but as firms learn about the productivity of non-referred workers, the latter experience higher within-firm wage growth conditional on the job-match being successful. However, their analysis is based on US data from the 1972 Survey of Natural and Social Scientists and Engineers which is unlikely to be representative of all occupations and of the UK job market today.

Cingano and Rosolia's (2012) results can be used to monetise young people's connections provided that a suitable outcome measure is developed. The results of Holzer (1988) and Simon

⁷² Potential external validity issues should be noted.

⁷³ Indeed, he does not report coefficients on control variables which would be needed in order to interpret the coefficients of interest from his probit regression.

and Warner (1992)⁷⁴ point in a similar direction but are less applicable to a value for money analysis.

A4.2.3 SM3c: Young people leave the programme with - and go on to have - the attributes to make the most of opportunities that present themselves

Soft skills are valued by many employers and can therefore help young people make the most out of professional opportunities (see Annex 1; Paterson et al., 2014).

Black and Spitz-Oener (2010) study how changes in the task content of work have affected the gender wage gap, holding the “price” of tasks fixed. As part of their analysis, they estimate the price of different tasks using a wage equation⁷⁵. The analysis is based on two datasets from West Germany⁷⁶, including the Qualification and Career Survey which asks respondents to state the tasks which they perform at work. The study finds a positive relationship between the range of non-routine interactive tasks⁷⁷ performed by workers and their wage⁷⁸. **The variety of non-routine interactive tasks performed by a worker can be indicative of higher proficiency in communication, teamwork, and leadership skills.** Therefore, the non-routine interactive task price estimate could be an indicator of the value of teamwork, leadership and communication skills as a whole^{79,80}.

In another study, Ramos et al. (2013) assess the relationship between the skills requirement of jobs and their associated wage using data from the Skills Utilization Survey in Singapore⁸¹. Observations are job positions rather than individuals, so the study does not, strictly speaking, measure the relationship between workers’ skills and their earnings. However, their results are indicative of the value of certain competencies insofar as being proficient in these skills increases one’s chances of filling a vacancy that requires such skills. The study finds that jobs requiring leadership, problem-solving skills, influencing skills and planning skills have a higher probability of paying higher wages. Interestingly, the association between teamwork and wages is not statistically significant. However, it is unclear how certain variables were constructed, which makes the interpretation of their coefficients problematic⁸². Furthermore, the results carry the caveat that they are based on the supply and demand for skills in Singapore rather than the UK.

Other studies have valued skills using the UK-based 1997 and 2001 Skills Surveys but have produced mixed results. Dickerson and Green (2002) estimate the effect of cognitive and non-

⁷⁴ Simon and Warner (1992) do not study the same aspect of job search, as they focus on salary. However, they reach the similar conclusion that job candidates who are able to draw on networks enjoy an advantage in the recruitment process, here in the form of a higher starting salary.

⁷⁵ The coefficients relating task requirements to wage – their estimates of task prices – are available in an earlier manuscript (Black and Spitz-Oener, 2007).

⁷⁶ Potential external validity issues should be noted.

⁷⁷ Non-routine interactive tasks are: negotiating/lobbying/coordinating/organizing, teaching/training, selling, buying/advising customers/advertising, entertaining/presenting, employing/managing personnel.

⁷⁸ Specifically, they regress wages on “task measures”. A task measure is the number of task types in a given category performed by each individual divided by the total number of task types in that category, expressed as a percentage. For instance, the non-routine analytical category comprises four different types of tasks: researching/analysing/evaluating and planning, making plans/constructions/designing and sketching, working out rules/prescriptions, using and interpreting rules. A worker who performs two of these task types would have a non-routine analytical task measure equal 50.

⁷⁹ Indeed, it should be emphasized that their results do not reflect the return to skills *per se*, as someone with good teamwork, leadership and communications skills may not necessarily perform a larger variety of non-routine interactive tasks.

⁸⁰ It should be noted that, although the model does account for certain observable factors that can influence both task content and wage, the omission of other, possibly unobservable factors cannot be fully ruled out. For instance, as argued by Hanushek et al. (2015), family background may influence both skill development and employment opportunities.

⁸¹ Potential external validity issues should be noted.

⁸² Indeed, their analysis is based on an ordinal logistic regression. Therefore, interpretation of the coefficients in terms of impact on the probability of various outcomes requires all explanatory variables to be fixed at a certain value (e.g. their mean).

cognitive skill requirements of jobs on wage^{83,84}. High-level communication skills, planning skills, “task discretion”, “task variety” are the only “soft” skills that are found to carry positive wage premia⁸⁵. The wage premium on (horizontal) communication (closely related to teamwork skills⁸⁶) is not statistically significant. Certain skills – e.g. client communication – are associated with lower wages⁸⁷. The authors warn that their estimates are not immune to omitted factors that could influence both skills and wages, so they propose alternative models to check the robustness of their results⁸⁸. Only the coefficients on high-level communication remains statistically significant in all models, except for certain occupation-specific models. Overall, the results suggest that there are positive returns to leadership-related skills (i.e. high-level communication skills⁸⁹) but not teamwork-related skills (i.e. horizontal communication).

Bacolod and Blum (2010), who draw on the US-based Dictionary of Occupational Titles (DOT) have also produced mixed results regarding the value of certain soft skills. The authors measure the returns to cognitive skills, motor skills, physical strength, and “people” skills in the US economy, the latter being most relevant to NCS outcome SM3c. The index of people skills is constructed based on four variables. Three of these respectively indicate whether an individual’s occupation requires direction, control, and planning of an activity; whether it requires exerting influence; and whether it requires adaptability to dealing with people beyond giving and receiving instructions. The fourth variable ranks the degree of interpersonal interaction required in an individual’s occupation⁹⁰. The results, however, are mixed: in their baseline model, people skills have positive and significant returns. However, when including the four people skill variables separately (not combined into an index), only those indicating direction control or planning and ranking the degree of interpersonal interaction were positive and significant. Furthermore, when the return to combinations of skills is considered, they only find positive returns to people skills when combined with other skills, and do not detect a positive return to people skills on their own. They draw the conclusion that in the US labour market, people skills are less valued in themselves than as complements to other skills.

Hanushek et al. (2015) study the relationship between cognitive skills and wages based on data from the Programme for the International Assessment of Adult Competencies (PIAAC). In particular, they find a positive relationship between problem-solving skills in technology-rich environments and wages in a range of countries, including the UK,⁹¹ where a one-standard deviation increase in problem-solving test score is associated with an 8.5% increase in wage. However, their baseline results may be biased due to unobserved factors affecting both skills and wages. While robustness checks performed in the study conclude that the baseline results are

⁸³ Skill measures were constructed through factor analysis.

⁸⁴ See also Felstead et al. (2002) for another UK-based study. See also Florida et al. (2012) for a study at the US regional level.

⁸⁵ High-level communication skills are defined as: “a range of related managerial skills, including persuading or influencing others, making speeches or presentations, long reports, analysing complex problems in depth”. Planning skills involve “planning activities, organising one’s own time, and thinking ahead”. Task discretion proxies for the ability to perform tasks under limited supervision. Task variety proxies for versatility and the ability to efficiently switch between tasks.

⁸⁶ The skills that are closest to teamwork are horizontal communication skills which are defined as: “teaching or training and/or working with a team of people, listening carefully to colleagues”.

⁸⁷ Client communication involves “dealing with people, selling a product counselling, or caring for customers or clients”.

⁸⁸ For instance, they attempt to control for unobserved heterogeneity by constructing a “pseudo-panel”: for each year of the survey (1997 and 2001) they compute the average skills levels of people who have similar occupations, are in the same age group and have the same gender (they refer to this grouping as a “job”). They then regress the change in wage on the change in average “job”-level skills between 1997 and 2001.

⁸⁹ It should be noted that high-level communication skills also involve problem-solving skills and therefore do not only reflect leadership skills. Indeed, the authors define high-level communication skills as “a range of related managerial skills, including persuading or influencing others, making speeches or presentations, long reports, analysing complex problems in depth”.

⁹⁰ According to that ranking, mentorship requires more interpersonal skills than negotiation which in turn requires higher proficiency than receiving instructions.

⁹¹ Problem-solving skills in technology-rich environments are defined as: “Ability to use digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks” (Hanushek et al., 2015)

likely to constitute a lower-bound on the returns to skills, only numeracy skills are included in the robustness checks⁹².

Borghans et al. (2007) illustrate how the wage premia associated with different skills can depend on the relative supply and demand for these skills and that there may be a trade-off between certain competencies⁹³. This study re-iterates that skill valuations based on wage premia are circumstantial, as the supply and demand for given competencies depend on a range of factors such as the growth and decline of certain markets or technological change. Moreover, this valuation method may not reflect all of the social benefits arising from these skills⁹⁴.

In a recent study commissioned by Filter-ed, London Economics (2017b) has evaluated the impact of skills gaps on firm-level outcomes.⁹⁵ However, the study was only based on hard skills such as IT proficiency or numeracy, however, the UK Employer Skills Survey 2015, on which the analysis was based, also contains questions on soft skills.

Several evaluations of other youth programmes have followed an alternative approach to valuing attributes. For instance, CFE Research (2013), monetises skills improvements using the prices of soft skills courses (e.g. the price of a leadership class)⁹⁶. According to the report, the market price of a skills class is the cost of undertaking an activity that would lead to a similar outcome (i.e. the cost of purchasing training in this field).

Overall, there is substantial evidence that certain soft skills are associated with wage premia. Although Bacolod and Blum (2010) do not detect positive returns to people skills by themselves, they find that these can increase the premia associated with other skills (e.g. cognitive). Based on Dickerson and Green (2002) and Ramos et al. (2013), there is more evidence of positive returns to leadership than to teamwork. Therefore, Kuhn and Weinberger's (2005) results on the returns to leadership skills could be used to compute a lower-bound estimate of the monetary value of the NCS' impact, while Black and Spitz-Oener's (2010) results could form the basis of an upper-bound. In light of findings by Dickerson and Green (2002) and Ramos et al. (2013), the upper-bound, which would also encompass teamwork skills, should be interpreted with caution.

A4.3 CE3: Young people go on to get more involved in activities that benefit others

Involvement in (non-political) activities that benefit others, or **volunteering**, directly supports the objectives of social engagement and social cohesion. In addition to its intrinsic benefits, volunteering can help create a sense of social responsibility and raise awareness about the challenges faced by society (Annex 1).

The 2016 evaluation extensively covers this outcome: the surveys ask whether respondents have helped anyone outside of their family and whether they have given time to help in any way outside of school or college hours, with some of the responses corresponding to volunteering

⁹² They provide two-stage least squares and Heckman regression estimates as robustness checks.

⁹³ The study uses the example of direct versus caring attitudes. The authors explain that the former serves to communicate in an unambiguous way, while the latter helps establish cooperation. It is also stated that both attitudes involve a trade-off in that: "Caring people are relatively good in establishing cooperation, but have difficulty being critical. Direct people are able to provide plain comments without reducing cooperation, but generate less cooperation." Furthermore, the study argues that different jobs require different relative degrees of caring and direct attitudes. For instance, it emphasises the importance of directness in engineering, which requires clear communication.

⁹⁴ In other words, valuing skills through their market returns does not account for the externalities that these attributes can generate.

⁹⁵ The firm-level outcomes are ordinal or categorical variables. For instance, one question asks: "Is the fact that some of your staff are not fully proficient causing this establishment to [lose business or orders to competitors]?" Therefore, assumptions would be needed in order to value skill gaps, as the amount of business lost to competitors is not specified.

⁹⁶ See for instance, the evaluation of Team v, a programme aimed at leadership development and social action (CFE Research, 2013).

activities such as raising money for charity (Kantar Public and London Economics, 2017b)⁹⁷. Respondents were also asked how many hours they had dedicated to these activities. The impact of the NCS 2016 on volunteering was of more than 5 hours per month⁹⁸.

Although the NCS follow-up survey was conducted only three months after participants had graduated, evidence from the two-year follow up to the 2013 evaluation can inform forecasts. The 2013 two-year follow-on evaluation suggests that participants continue to spend time volunteering up to more than a year after the end of the programme (Candy et al. 2017). In particular, a statistically significant impact was detected 17 months after graduation, but this was no longer the case 28 months following completion of the programme. The 2016 evaluation report uses these figures to estimate the total impact of the programme until *full decay* in volunteering hours under various assumptions, including that of linear decay from month 16 to month 28 (i.e. volunteering time declines at a constant rate), but also adopting the more conservative assumption that volunteering hours fall to zero in month 16 (Kantar Public and London Economics, 2017b). Monetisation of the NCS' impact was based on the median hourly wage from the UK Annual Survey of Hours and Earnings.

As argued in the two-year follow up to the 2013 evaluation, 28 months following graduation from the programme, respondents found themselves at a stage of their life where they perhaps lacked the time to undertake volunteering or became increasingly concerned about their financial circumstances⁹⁹. Therefore, the drop in additional volunteering hours within 28 months may not imply that involvement in activities that benefit others completely ceases within two years of completing the programme. Graduates may become more actively involved in their community or take on pro-bono work later on in life.

Overall, previous evaluations offer a methodological framework and evidence on the persistence of volunteering. These can be used to monetise the long-term impact of the NCS on involvement in activities that benefit others.

A4.4 CE4: Young people go on to get more involved in political processes and contribute their insights to public debate

As part of the objective of social engagement, the NCS aims to increase young people's involvement in political processes and public debates. As argued by Flanagan and Levine (2010), a politically engaged youth is more likely to express its views and discontent through democratic channels and contribute fresh insights to political issues.

The 2016 evaluation surveys include several outcome measures such as the percentage of respondents who have organised a petition to support a local or national issue, the percentage of respondents who had contacted someone (e.g. council, media, school) about something affecting their local area, or the percentage of respondents who were absolutely certain to vote in the next General Election¹⁰⁰. While impact of the NCS 2016 on the percentage of positive responses to the last question was of more than 10 percentage points, the impact on the first two was smaller or not statistically significant¹⁰¹. As with education, the impact of the NCS on these outcome measures may erode in the years following graduation. Specifically, secondary and tertiary

⁹⁷ Questions Q2, Q3 and Q4 of the baseline summer 2016 NCS questionnaire.

⁹⁸ This excludes the time spent on social action as part of the programme.

⁹⁹ The report supports this claim with a body of evidence, including Demos (2013) and V (2009, pp. 24-26).

¹⁰⁰ Questions Q2 and Q6 of the baseline summer 2016 NCS questionnaire.

¹⁰¹ The NCS was only found to have had an impact on the percentage of people who have contacted someone about something affecting their local area in Autumn 2016.

education may interact differently with the effect of the programme¹⁰². More could be learned about this in a long term evaluation.

The literature on the valuation of political participation and contribution to public debate is scarce. The National Conference on Citizenship et al. (2011) have published a report in which they relate voter registration and public meeting attendance to change in unemployment – an outcome which can be monetised¹⁰³. However, the data they use is drawn from the US Current Population Survey between 2006 and 2010, a period which covers the 2008 financial crisis and the subsequent recession. Therefore, their results may not be applicable to the UK in the current economic climate. Moreover, their model only controls for observable factors: unobservable factors that may influence both social engagement and unemployment cannot be ruled out^{104,105}.

Overall, the economic impact of political participation and contribution to public debate is not firmly established in the literature, making it challenging to reliably monetise the impact of the NCS on that outcome.

A4.5 SC1: Young People Go on to Form Broader Social Networks

Another key long-term outcome as identified in the Theory of Change (Annex 1) is whether young people go on to form **broader social networks** as a result of participating in the NCS. This long-term outcome reflects the programme's aim to create ties between people from different backgrounds in order to generate greater social trust and co-operation. The broadening of social networks contributes to the NCS' objectives of social cohesion and social mobility.

A number of measures captured in previous NCS evaluations can be used to evaluate the impact of the NCS on the broadening of young persons' social networks. For instance, one of the survey questions used in the 2016 NCS survey asks respondents whether they agree that if they needed help, there are people who would be there for them¹⁰⁶. However, the question does not extract information on whether the respondent would refer to their social network or a formal institution (e.g. the police). The questionnaire also asks how often respondents have had positive or negative experiences with people from a different race or ethnicity, and how comfortable respondents would be with a relative or friend going out with someone from a different background¹⁰⁷. Depending on the specific outcome measure used and the NCS cohort, the programme's impact was mostly positive, although in many cases, responses were not statistically significantly different from zero.

¹⁰² The relationship between political engagement and education has been extensively studied. On the link between higher education and political engagement, see for instance Hillygus, (2005).

¹⁰³ Specifically, they find that a percentage-point increase in voter registration and public meeting attendance were respectively associated with an extra 0.1 and 0.2 percentage point reduction in unemployment.

¹⁰⁴ Although the independent variables, measured in 2006, are lagged compared to the dependent variable – the 2006-2010 change in unemployment – thereby providing some evidence against reverse causality, omitted variables cannot be fully ruled out.

¹⁰⁵ A follow up study (National Conference on Citizenship et al., 2012), controls for a wider range of factors and uses a larger set of observations but the study does not provide the magnitude of the estimated coefficients on voter registration and public meeting attendance. Moreover, the relationship between voter registration and unemployment is no longer statistically significant when non-profit density and social cohesion are accounted for (the index of social cohesion was constructed from the following variables, although the exact combination varied from year to year: frequently talking to neighbours, frequently doing favours for neighbours, always trusting neighbours, frequently seeing or hearing from family and friends, working with neighbours, attending community meetings, and volunteering). It is also stated that the Penn State Social Capital Index – constructed from measures of voter turnout, association membership and response rates to mailed Census forms – predicted unemployment resilience, although the magnitude of the coefficient was not provided.

¹⁰⁶ Question Q12 of the baseline summer 2016 NCS questionnaire.

¹⁰⁷ Question Q20 and Q18 of the baseline summer 2016 NCS questionnaire.

Understanding Society¹⁰⁸, a longitudinal survey covering social, economic and behavioural characteristics of the British population, comprises several questions that relate to social networks such as whether people have a spouse, family member or friend to rely on if they have a serious problem; whether people give special help to at least one sick, disabled or elderly person living or not living with them; whether people borrow things and exchange favours with their neighbours; and whether parents regularly receive or give practical or financial help from/to a child aged 16 or over not living with them¹⁰⁹. These measures could potentially be adapted and incorporated into future NCS surveys to measure the impact of the NCS on the broadening of young people's social networks.

There are many ways in which social networks can affect economic outcomes¹¹⁰, although the goal of forming broader social networks to some extent overlaps with other outcomes such as having the connections to make the most out of opportunities (SM3b) and getting more involved in activities that benefit others (CE3). For instance, Foster et al. (2013) have estimated the total value of informal adult care in the UK using the wage of a formal care service provider – deemed the most appropriate alternative to informal care. Yet, informal care could either be considered a form of network support (SC1), or of voluntary work (CE3).

Overall, the literature relating to social networks does not provide enough evidence to monetise the broadening of social networks as it either covers a broader range of long-term outcomes (see for instance Foa, 2011) or focuses on specific types of networks such as job networks. The literature on labour market networks is particularly extensive but it is mainly relevant to valuing young people's connections to make the most of opportunities that present themselves (SM3b), which is further discussed in section A4.2.2.

A4.6 SC4: Young people go on to have higher levels of social trust

According to the Theory of Change, the NCS should encourage people to have higher levels of social trust. Greater social trust feeds into the social objective of social cohesion and can be encouraged through social mixing and team-based volunteering activities (Annex 1). The surveys conducted in 2016 asked whether respondents thought that most people can be trusted.¹¹¹ The impact of the NCS on the share of positive responses was 4 percentage points in Summer 2015 but was not statistically significant in 2016. Although the impact of the programme on social trust is not monetised in previous NCS evaluations, there is academic literature that considers the effect of social trust on both individual and aggregate economic outcomes.

On the macroeconomic effects of trust, Zak and Knack (2001) predict that greater social trust leads to higher **economic growth** as people (i.e. employers) divert less resources away from direct production into monitoring their agents (i.e. employees). They empirically test this prediction and

¹⁰⁸ Office for National Statistics (2015); University of Essex. Institute for Social and Economic Research (2016). Available at: <https://discover.ukdataservice.ac.uk/series/?sn=2000053>

¹⁰⁹ It should be noted that some of these questions also capture whether young people are getting more involved in (non-political) activities that benefit others (CE3).

¹¹⁰ See Healy & Côté (2001). In addition to impacting individual income (e.g. via labour networks), social networks can influence health, crime, political outcomes and wellbeing. Discussions on the link between social capital and happiness, health and economic outcomes can be found in Putnam (2000), where social capital is defined as "social networks and norms of reciprocity and trustworthiness that arise from them". See Kawachi et al. (1999) for a study of the relationship between measures of social capital (defined as norms of reciprocity, trust and membership in voluntary associations) and self-reported health at the US state level. The outcome measure – fair or poor health versus excellent, very good or good health – however, is difficult to monetise. Furthermore, their analysis is based on logistic regressions but they do not report all coefficients, making the interpretation of the coefficients of interest problematic. See also Rose (2000) who uses data from the 1998 New Russia Barometer survey to address a similar question, namely the impact of social capital – defined as networks that are used to provide goods and services in society – on physical and emotional health. The definitions of social capital in the above-listed studies point to the overlap and interlinkages between the notions of social capital, social cohesion, social networks, social trust and civic (social) engagement.

¹¹¹ Question Q17 of the baseline summer 2016 NCS questionnaire.

find that jurisdictions with a higher percentage of ‘trusting people’ experience higher GDP growth rates^{112,113}.

Butler et al. (2016) focus on the consequences of trust at an individual level. They measure the effect of trust intensity (measured on a 10-point scale) on individual economic outcomes. They find a hump-shaped relationship between trust and individual income (at first, income increases with trust before decreasing). The study explains that people with low levels of trust are less likely to engage in collaboration, for fear of being cheated. They therefore, forego potential benefits from co-operation (e.g. profit from a joint venture). On the other hand, people with very high levels of trust are excessively willing to collaborate, but people may take advantage of them (e.g. embezzle profits from a joint venture). The study finds that intermediate levels of trust are ‘optimal’.

According to the estimates of Butler et al. (2016), an increase in the trust levels of NCS participants may have a positive or negative effect on their economic outcomes, depending on their baseline level of trust (e.g. if young people, on average, are very trusting to begin with, being more trustworthy may in fact have a negative impact on their income). Yet, this would not account for the fact that trusting people may provide other agents with greater economic opportunities through their higher willingness to invest¹¹⁴. This, however, would be captured in Zak and Knack’s (2001) estimate which encompasses the economy-wide benefits of trust.

Zak and Knack’s (2001) findings provide evidence for a monetisation of the NCS’ impact on social trust. Nevertheless, it should be noted that Zak and Knack’s (2001) results are based on the World Values Surveys, which are administered to representative samples of countries’ populations, while the NCS cohorts are not a representative subset of the UK population. Therefore, a monetisation based on their results should be interpreted with caution.

A4.7 SC3: Young people feel a greater sense of belonging both on exiting the programme and in the future

A further objective of the NCS is to instil in participants a greater **sense of belonging** during the programme and in the future. Although less tangible than outcomes related to education or skills, a sense of belonging is crucial to the objective of social cohesion. The NCS aims to encourage young people to develop a greater sense of belonging to a team (e.g. within the NCS), their local community and their national NCS cohort, along with greater respect for pluralism (Annex 1).¹¹⁵

The Theory of Change mentions “generating a sense of responsibility and agency amongst young people in relation to community issues” as helping young people develop a sense of belonging. The 2016 evaluation comprises several proxies for a sense of responsibility and agency that in turn could potentially serve as proxies for a sense of belonging. For instance, the Summer and Autumn 2016 NCS follow-up questionnaires ask participants whether they felt a greater sense of

¹¹² Other notable studies on trust and social capital include Knack and Keefer (1997) and La Porta et al. (1997).

¹¹³ Depending on their model, they find that a percentage point increase in the share of the population agreeing that most people can be trusted is associated with a 5-12 percentage point increase in GDP per capita growth.

¹¹⁴ In that sense, trust could produce a positive externality: a social benefit not taken into account by the agent that generates it.

¹¹⁵ An appendix to the Theory of Change refers to various definitions of belongingness, each of which reflects important aspects of the concept in the context of the NCS. For instance, Goodenow (1993) defines belonging in the context of education as a “sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class.” Baumeister and Leary (1995) refer to belongingness as the “frequent, affectively pleasant interactions with a few other people”, and which “take place in the context of a temporally stable and enduring framework of affective concern for each other’s welfare”. Together, these definitions convey the aims of the NCS to foster positive interactions between individuals and groups, and instil in young people the sense that they are important to and valued by society.

responsibility towards their local community¹¹⁶. Baseline and follow-up surveys ask whether respondents feel able to have an impact on the world around them¹¹⁷. In Summer 2016, the programme's impact on the share of positive responses to this question was 17 percentage points.

The Theory of Change also states the importance of respect for pluralism in fostering a sense of belonging. This aspect is covered in the existing survey which asks how often respondents have had positive or negative experiences with people from a different race or ethnicity, and how comfortable respondents would be with a relative or friend going out with someone from a different background or a minority. These two outcome measures were mentioned above as potential proxies for the broadening of social networks, which suggests that there is a degree of overlap between measures of belonging and social network breadth¹¹⁸.

This overlap makes it difficult both to measure and monetise the outcome. Indeed, while there have been studies on the impact of variables related to "belonging" on economic performance, these variables overlap with other outcomes of the programme and are better proxies for the broader notion of social cohesion. For instance, Foa (2011) has created an index of social cohesion made up of multiple indicators that cover the aspects of intergroup prejudice, discrimination and violence, and social trust. He finds a positive relationship between this index and average annual per capita GDP growth between 1990 and 1999. However, given that the index also captures social trust and social network breadth, using Foa's (2011) results to monetise belongingness would likely produce an overestimate.

¹¹⁶ Question Q054-Q107 of the summer 2016 NCS participant follow-up questionnaire. In order for this question to serve as an outcome measure, it would have to be adapted and included in all questionnaires (control and participant, baseline and follow-up) so that a difference-in-differences analysis can be implemented.

¹¹⁷ Question Q5a of the baseline summer 2016 NCS questionnaire. Note that this is also a potential proxy for confidence.

¹¹⁸ Although the concepts of belongingness and connectedness are distinct (see Crisp, 2011, as cited in Annex 1), measures which do not perfectly capture each outcome may overlap.