Estimating the Cost of Being "Not in Education, Employment or Training" at Age 16-18

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CONTENTS

Executive Summary

The aim of this report was to set out the available research and data and to provide a methodology to provide preliminary estimates of the costs associated with young people not being in education, employment or training aged 16-18 (NEET). Costs were interpreted broadly to include costs to individuals, their families and to the rest of society. An attempt was made to provide estimates across the lifespan of the defined group. Estimates were defined in terms of current, medium and long term costs. The implications for public finance costs, which include changes in benefit payments and taxes were also investigated. Not all costs could be quantified. The quoted estimates should be viewed as preliminary and are likely to be underestimates of the true cost. Suggestions are made for the further development of the methodology.

The aim of the research was to estimate the additional costs that occur to a defined group of young people who were NEET at the end of 1999 compared to the hypothetical situation that these young people had the same current and future experience as the rest of their contemporaries. Estimates are provided across the whole group for some effects, for example the impact in terms of lost earnings, of educational underachievement and unemployment, but not others, such as the health problems which may be associated with unemployment. For many areas no data were available to estimate the impact of being NEET particularly in the longer term. Estimates are provided on the costs of educational underachievement, unemployment, inactivity, crime and health. Some additional costs for specific over-represented groups within the NEET population were also calculated, for example, treatment costs for drug misusers. However, data were not available to estimate whether unemployment costs were higher on average among drug misusers in the NEET group compared to the non drug misusers in the NEET group. Only for teenage mothers could separate analyses of this kind be conducted so that the total costs associated with a sub-group could be identified.

As an alternative, hypothetical life courses have been created and estimates made of the lifespan costs. The estimates indicate how certain young people may incur many costs as a consequence of combinations of circumstances and factors, for example, unemployment, drug abuse, and crime.

Methodology

The broad costing structure was taken as estimating the lifetime costs of a current cohort of NEET young people compared to the alternative assumption that this group had been in the non-NEET population. This requires a number of assumptions. The current costs of this cohort depend in part on their experiences before the age of 16. The estimated additional costs of NEET give an indication of the potential savings from changes in social policy but not all projected future costs could be reduced by such policies. Also future estimates have to be made assuming benefit and tax levels are at current levels and the economic situation would be similar.

The methodology has three stages. The first stage was to outline potential effects of being NEET (compared to non-NEET) divided between current, medium and long term costs. Potential effects were drawn from literature. Educational underachievement; unemployment; inactivity/not currently in the workforce; poor physical or mental health or disability; substance abuse; and crime were identified as being associated with being NEET. The effects are discussed under separate headings although there may be overlaps and associations between them. For each, the costs for the individual, the families the resource or opportunity costs and the public finance costs are listed.

To calculate the total net cost of the NEET population, estimates are required of the numbers of people experiencing particular consequences and the cost per person (or unit cost) of such consequences. This is the second stage of the methodology. For example, the cost of unemployment among 16-18 year olds requires an estimate of how many more people in the NEET population are unemployed compared with the non-NEET group. This number is then multiplied by, for example, the cost of benefit payments per person in the third stage of the methodology. All other costs are similarly dealt with. These calculations require assumptions about excess numbers (incidence) and unit costs to be used. Estimates were generally calculated on the most conservative basis. It proved easier to provide some estimates of the public finance consequences of NEET than the wider social costs. Overall the total cost estimates are likely to be a minimum estimate of the costs of NEET because of the conservative approach and the inability to find cost estimates of all effects.

Costs are based on the NEET cohort as estimated at the end of 1999. Costs are estimated in 2000/01 prices and future costs are discounted to present values using a discount rate of six per cent.

Main Findings

- As a basis for the incidence estimates the population of those 16-18 year olds NEET was taken to be the then DfEE estimate of 157,000 at the end of 1999.

- The total estimated additional lifetime costs of being NEET at age 16-18 at present values (2000/01 prices) are estimated as £7 billion resource costs, and £8.1billion public finance costs at a conservative estimate.

- The main items for which no estimates of resource cost could be made include: the wider macro impact of educational underachievement and a poor skills base; additional health impacts of unemployment including premature death; criminal careers; social housing; the full impact of excess smoking, alcohol and drug misuse among the NEET group; and the more long term intergenerational impacts.

- While the public finance figures are more complete there are also missing impacts including: the current expenditure on remedial courses for those with educational deficiencies; some of the medium and longer term measures to reduce unemployment; and public finance support for voluntary sector schemes.

- For the items where costs could be identified, the average per capita total present value costs over a lifetime are £45,000 resource costs and £52,000 public finance costs.

- Thus if 10,000 (less than 10 per cent of the estimated population of 157,000 NEET population) people were removed from the group of NEET or socially excluded young people, total current savings would be £53 million in resource costs and £55 million in public finance costs. Lifetime present value savings would be £450 million in resource costs and £520 million in public finance costs.

- Of the costs identified, medium term costs dominate. This is mainly a result of the working life costs of underemployment and unemployment. Underemployment refers to people who are not employed to their full potential, usually because of a failure to gain the educational qualifications of which they are capable.

- Health and crime costs seem relatively low compared with the costs of educational underachievement and unemployment. All relevant health and crime costs may not have been included so these costs are likely to be underestimated. Some people however may incur very high health and crime costs.

- The costs of teenage motherhood among the current costs of NEET 16-18 year olds are highlighted and for this group some overall estimate of impacts including medium and longer term unemployment costs can be made.

- Not all young people who are NEET are involved in crime or drug abuse or are teenage mothers, all of which are costly behaviours. However some young people are involved with many of these behaviours. The numbers who have

various combinations of behaviour are not known. At an individual level the hypothetical case studies illustrate very clearly how costs can accumulate over the life course for certain individuals and groups of young people who are NEET at age 16-18. Using the case studies previously described in "Bridging the Gap" (Social Exclusion Unit, 1999), the total costs for 'Lisa' and 'Adam' amount to approximately £84,000 when discounted to present values (assuming a constant rate). This is almost twice the per capita costs (£45,000) for the average NEET young person.

Further development

One major problem in carrying out this exercise is estimating what happens after age 30. Most of the estimated probabilities (for employment, for example) even at this age are based on cohort studies that were carried out in a very different economic and policy context to that in which the current 16-18 year olds will live their lives. Further work could model future outcomes for current cohorts. One potential future development would be to attempt to construct simulation models of different life stage consequences. These would simulate, for example, the employment consequences of, say, different lengths of time unemployed at age 16-18 with different levels of qualifications and degrees of substance abuse. This sort of exercise could provide information on what factors or combinations of factors make significant differences to costs. The use of a tax-benefit model to estimate actual benefits received and taxes paid would improve on the average calculation used here. Refinement of the costs for poor health, crime, and substance abuse would require data to be gathered specifically for different ages. The costs incurred by voluntary organisations in addressing the social exclusion of young people need to be assessed and included for a more complete estimate.

Section 1: Introduction to costing methodology

1.1 Aims and objectives

In the accompanying project, available literature has been reviewed to examine the impact on young people of not being in education, employment or training (NEET) when aged between 16 and 18 (Coles et al, 2002). The aim of the research reported in this report is to bring together data from the chapters in the literature review with data on both the NEET and non-NEET population in order to provide preliminary estimates of the social costs of such 'social exclusion'. However, costs can be defined in a number of different ways to address different questions. The question for this study was to estimate the additional costs that occur to a defined group of young people who were NEET at the end of 1999 compared to the hypothetical situation that these young people had the same current and future experiences as the rest of their contemporaries.

1.2 Developing the costing framework

Which costs are considered depends on the costing framework. For this study two frameworks were of interest. The first involves an accounting approach to trace, from a narrow government perspective, the impact on public finances (balance between revenue and expenditure) arising from the 16 to 18 year old NEET group. Such analysis involves estimating the current policy expenditure to reduce the numbers in the group and the public finance implications of any consequences such as increases in social benefits, health, welfare or criminal justice public expenditure.

The second framework involves total resource costs, valued in opportunity cost terms, arising from this group. The opportunity cost is defined as the value of any resource in its best alternative use. In this framework the aim is to quantify all the impacts whoever bears the cost. So, for example, this should include some estimate of the productivity loss to the economy and the welfare loss to the individual. Overall some of the public expenditure impacts may not appear in such a model. For example, unemployment benefits represent a transfer from one group of taxpayers to another group, the unemployed. The payments do not in themselves involve any resource loss for the whole society although the additional administration needed to make such payments would be an additional resource use that would not be needed without a NEET group. Within this framework, only the resource cost impact of unemployment on the individual and the family will be considered along with the impact in terms of resource or opportunity costs to the rest of society.

It is also necessary to specify the population to which the costs apply. It was considered that the purpose of the study was to cost the NEET population currently aged 16, 17 and 18. The costs of this cohort are then calculated across their projected lifespan and compared to the costs that they would have incurred if they had not been NEET at this age. Both the public finance consequences and resource costs are calculated in this way adjusting for any potential double counting for the same effect. The costs are estimated for the current period and then predictions made of the size of medium and long-term costs. Current costs borne for this defined cohort reflect the policy impacts of previous years and the experiences of the cohort before the age of 16. New policies may imply there are different future projections of costs and consequences for future cohorts. Also medium-term predictions can only be made assuming current economic conditions and social policies continue. Long-term costs however, require the greatest number of assumptions.

The other general issue to be considered is the nature of the 'excess' costs incurred by the NEET group. This implies some comparison can be made with young people who are not NEET, and that any excess costs calculated in this way can be attributed to being NEET. However, such comparisons may in themselves be related to economic conditions with consequences becoming possibly larger in economic downturns than when the economy is booming. The estimated costs in the report give an indication of the potential savings in public finance or resource costs from changes in social policy but not all projected future costs could be reduced by such policies.

1.3 Structure of the report

Following the pattern in the chapters of the literature review project (Coles *et al.*, 2002), costs are considered for the different groups of circumstances for NEET individuals:

- educational underachievement;
- unemployment;
- inactivity/not currently in the workforce;
- those currently in poor physical or mental health, or disabled;
- substance abuse; and
- homelessness.

For each of these circumstances the next section identifies and provides a comprehensive list of all the costs incurred for individuals, families, resource costs

and public finance costs. These are set out first for the current time period, secondly for the medium-term and finally for the long-term. The effects are discussed under these separate headings although there may be overlaps and associations between them. These issues are considered when estimates of the effects are considered in a later section.

The next stage of the methodology is to estimate the numbers of people experiencing particular consequences. The excess incidence of different impacts, comparing the NEET with the non-NEET group, for each circumstance and period are considered in Section 3. The third stage involves assembling the information and estimates of the unit cost for each identified type of effect and this is detailed in Section 4. The final section provides a summary of the overall estimates of the social costs and the implications for public finance by using the estimates of numbers with different effects with the estimates of the unit costs of such effects.

Section 2: Costs associated with being NEET at age 16-18, current, medium and long-term

This chapter lists all the costs (current, medium and long-term), associated with being NEET at age 16-18. It considers in turn, the costs relating to unemployment, educational underachievement, inactivity, poor health, substance abuse, and involvement with crime. Under each of these headings the costs associated with the individual, the family, the resource or opportunity costs and finally the public finance costs are set out. This section sets out what would ideally be required to undertake a complete costing exercise. It is designed to be an inclusive and comprehensive list of all the costs for which numerical values will be sought. Subsequent sections set out the relevant numerical values to be found in the literature (see Coles *et al*., 2002*)* for a detailed review of the available literature), with the areas where no estimates can be made summarised in Section 5.

Part 1 of this section lists all current costs, Part 2 all medium-term costs and Part 3 all long-term costs. Under each category of unemployment, poor health and so forth the resource costs and the public finance costs are given more prominence than the individual or family costs. Resource costs and public finance costs are estimated with numerical values in subsequent sections. For completeness, the descriptions of individual and family costs are included in this section. Some impacts such as foregone earnings can be seen to be a resource cost (in terms of the foregone output) but also to have an impact on the individuals concerned. However, it proved impossible to find data to estimate other impacts and they are not included in the rest of the report.

2. 1   Current costs of young people NEET aged 16-18

In this section costs are discussed under separate headings although there may be associations and overlaps between them. For example educational underachievement may result in unemployment. Unemployment may result in depression, substance abuse, and crime. Some young people will have poor health, and disabilities, or be involved with substance abuse and crime at age 16 and continue into their time NEET. For others these outcomes may be the consequences of experiencing a time NEET between the ages of 16-18. In this exercise perhaps it is more helpful to think in terms of associations between these factors rather than causal relationships. The methodology adopted in this study aims to determine the effect of being NEET at ages 16 to 18 compared to the hypothetical situation that the

cohort identified experienced the same outcomes as those who are not NEET aged 16-18.

2.1.1 Educational under-achievement: associated current costs

Educational underachievement can arise in a number of ways: poor school leaving qualifications; drop out from further education; failure to access higher education; or drop out from training.

Individual: At the individual level, failure to achieve full educational potential can result in inability to obtain the job or course of choice; perhaps illiteracy and innumeracy; loss of earnings compared to the non-NEET group; lower non-pecuniary rewards such as job satisfaction compared to the non-NEET group; and poorer 'quality of life'.

Families: The families of those who do not or are slow to reach their educational potential are likely to be involved in longer periods of support; and private costs of additional education.

Resource or opportunity costs: Young people with poor education or skills mean that the workforce is less able to do skilled work and it is not fully utilised. Lack of skills can lead to unemployment, employment in less productive jobs (underemployment) and hence lost productivity.

Public finance costs: The public finance costs of poor educational achievement arise from the need to identify the individuals; the provision of remedial courses; benefit payment; payments of training allowances; and loss of taxation income and National Insurance (NI) contributions when individuals are out of the workforce because of their educational underachievement.

2.1.2 Unemployment: associated current costs

Young people may be unemployed at ages 16,17 and 18 or throughout their working life. Different lengths of time unemployed are likely to have different outcomes.

Individual: The unemployed individual experiences loss of earnings, increased likelihood of depression, poor health, and difficulty in maintaining relationships.

Family: Families are likely to be involved in financial and other support for an unemployed young person.

Resource or opportunity costs: The resource cost of unemployment stems from the loss of output from unemployed young people; additional health costs resulting from the poor health and depression associated with unemployment; and voluntary sector costs incurred through initiatives with unemployed young people. Unemployment can also lead to a breakdown of social cohesion.

Public finance costs: Benefits paid to unemployed people along with loss of contributions and tax revenues are direct public finance costs. The additional health costs; social and welfare advice; publicly funded schemes to reduce unemployment are also charges on the public purse. Voluntary sector input often includes an element of public funding.

2.1.3 Inactive/not currently in the workforce: associated current costs

The main reasons for a young person describing themselves as being out of the labour market or inactive are teenage motherhood or being an informal carer. These circumstances apply to women, exclusively in the case of motherhood, and mainly to women in the case of involvement in informal care.

Individual: Young mothers and young carers may experience some lost quality of life, for example a loss of time without responsibilities and opportunities for leisure activities compared with other young people; delays in educational and employment opportunities; lower incomes, dependency on state or parents; and stress.

Families: Families are likely to be involved in financial and social support for mother and baby. They may benefit from the services of the young carer.

Resource or opportunity costs: Teenage motherhood results in additional health and social resources for child. Productivity is lost for both teenage mothers and young carers.

Public finance costs: The public finance costs include: direct provisions for teenage motherhood; health and social services inputs; and lifetime learning provisions. The loss of earnings from this group results in benefit payments and loss of NI contributions and tax revenue. There may be some 'savings' as a result of work of young carers because their absence would involve public intervention, for example, paid carers.

2.1.4 Poor physical and mental health and disability: associated current costs

Included among those who are NEET are some young people with a variety of disabilities such as mental illness and depression; long-term illness; or physical impairments. Early death or suicide can be an outcome.

*Individua*l: The costs to the individual of such circumstances are obvious: stress, pain, and frustration in achieving aims. Incomes are likely to be lower than for other young adults.

Family: The families of young disabled people often pay a high price through financial and social costs; stress, and the provision of informal care.

Resource or opportunity costs: Disability clearly results in the loss of the full contribution of the individual, and subsequent loss of output.

Public finance costs: The public health costs of disability stem mainly from health and social services inputs; provision of sheltered workshops; and schemes for supported employment for disabled people. Other costs are benefit payments, loss of contributions and taxes.

2.1.5 Substance abuse: associated current costs

Those who are NEET have a higher propensity to substance abuse than other young people. They are more likely to drink alcohol, smoke and take illegal drugs, all of which can have an impact on their lives. The health impact of smoking tends to come later in life so the costs below mainly relate to alcohol and drug abuse.

Individual: Alcohol and drug abuse can mean the individual has difficulty in obtaining or holding down a job with consequent loss of earnings. Abuse can lead to sickness, and premature death. Drug users run the risk of being drawn further into drug dealing, and crime to support their habit.

Resource or opportunity costs: Substance abuse results in excess use of health and other services, high job turnover, and lower productivity. Drug abuse has consequences in terms of the victims of drug-related crime, the wider community effects of drug use, and the impact of the illegal economy. Alcohol abuse can result in property damage and violence to the person. Smokers affect others through passive smoking.

Public finance costs: The obvious public finance costs of substance abuse relate to health and welfare service costs, drop-in centres; rehabilitation units; treatment and prevention costs. Because of the association between drug use and crime, costs are incurred for the police and criminal justice system. Alcohol related accidents and public order problems can costs for health, police and criminal justice system. Unemployment consequent on substance abuse results in benefit payments and lower contributions and tax receipts. The voluntary sector initiatives to help with substance abuse also involve public sector costs.

2.1.6 Crime: associated current costs
Unemployed young people are more likely than others to be involved with crime, and particularly as a consequence of drug abuse.

Individual: The individual who is involved with crime has more difficulty than others in obtaining or holding down a job, and risks of being drawn further into crime. They have a lower employment potential.

Resource or opportunity costs: The resource costs resulting from criminal activities cover such items as property and personal damage as part of crime including all the victim's costs (listed in Barnett, 1993).

Public finance costs: The main public finance costs of crime relate to police and criminal justice system costs. Social services costs are also incurred, as are the costs of unemployment including benefit payments, and lower tax and insurance contributions.

2.1.7 Homelessness: associated current costs
Many homeless young people are also NEET.

Individual: Homeless young people have a lower employment potential, as it is difficult to obtain a job without permanent address. They have poorer health, and low quality of life measures compared with others.

Resource or opportunity costs: Homelessness generates additional health costs; voluntary sector costs; and lower output.

Public finance costs: Publicly funded hostels and social housing costs for homeless people are charges on public finances. Voluntary sector costs for the great number of homeless initiatives also include an element of public finance costs.

2. 2 Medium-term costs of young people having been NEET age 16-18

The medium-term costs associated with having been NEET at age 16-18 occur after age 18 and in the earlier part of the working life.

2.2.1 Educational underachievement: associated medium-term costs

There are consequences after age 18 for young people who have not achieved their full educational potential.

Individual: The individual experiences a widening of the gap between themselves and their contemporaries who are better qualified, and there may be consequent resentment. They are likely to have lower incomes, lower quality of life measures, and be more susceptible to unemployment than others.

Resource or opportunity costs: Similar to the current costs of educational underachievement the medium-term costs still include a workforce less able to do skilled work; continued underemployment more sustained unemployment for those with poorer education and training.

Public finance costs: The identification of individuals and provision of remedial courses result in additional expenditure. Benefit payments, lower tax and NI contributions are also public finance costs.

2.2.2 Unemployment: associated medium-term costs

Those NEET at age 16-18 are also more likely than others to experience unemployment later in their working lives.

Individual: For the unemployed this means further loss of earnings. Unemployment can also delay the move out of the parental home, the ability to take on separate housing costs or to establish a relationship and family. Problems of depression, poor health and poorer quality of life can also occur, as can difficulty in maintaining relationships sometimes leading to divorce.

Resource or opportunity costs: Continued unemployment means continued loss of output from unemployed.

Public finance costs: The public finance costs of unemployment stem from paying benefits, reduced tax and NI contributions, money spent to reduce unemployment, social services, social housing, and health costs.

2.2.3 Inactive/not currently in the workforce: associated medium-term costs

Early motherhood continues to have an impact on life beyond age 18.

Individual: Early motherhood means continued delays in educational and employment opportunities; lower incomes, and dependency on the state or parents.

Resource or opportunity costs: The resource costs of early motherhood stem from the lost output of the mother. Often it has an impact on the children (intergenerational effects) such as the educational underachievement, and poor health of the children.

Public finance costs: Early motherhood involves public finance through health and social services inputs, benefit payments, reduced insurance and tax contributions, life time learning provisions. Voluntary sector inputs also include an element of public funds.

2.2.4 Poor physical and mental health, disabilities: associated medium-term costs

Most of the disabilities, physical and mental, long-term illness, present at 16-18 continue into the following years. There may even be an increased likelihood of disability over time.

Individual: The individual will continue to feel stress, pain, and frustration in achieving aims.

Resource or opportunity costs: The resource cost of disability relates to the loss of the full contribution of the individual, and associated loss of output.

Public finance costs: Health and social services inputs, benefit payments, and loss of tax and insurance contributions are extra public expenditures associated with disability. Voluntary sector inputs also include some public funding.

2.2.5 Continuing substance abuse: associated costs

While rates of smoking, drinking and taking illicit drugs are similar among young men and women, men outnumber women among those with drug and alcohol abuse at this age. Smoking, however, continues at a similar rate for men and women.

Individual: Individuals involved in substance abuse continue to have difficulty in obtaining or holding down a job resulting in a loss of earnings. They continue to risk being drawn further into drug dealing and other crimes.

Resource or opportunity costs: The resource costs of substance abuse arise from excess use of health and other services.

Public finance costs: Public finance costs of substance abuse include health service costs, the costs of drop-in centres and rehabilitation units; the costs of police and the criminal justice system for adults, and the public sector input to the relevant voluntary sector initiatives.

2.2.6 Crime: associated medium-term costs

Individual: Those involved in crime have difficulty in obtaining or holding down a job, risk being drawn further into crime; being sent to prison; and some will develop a criminal career.

Resource or opportunity costs: The resource costs of crime arise from the damage from crime and victim costs.

Public finance costs: Crime incurs public finance costs through the police; criminal justice system; and social services. The poorer employment of those involved in crime results in higher benefit expenditure and lower tax and insurance contributions.

2.3. Long-term costs of being NEET at age 16-18

Those NEET aged 16-18 are more likely than others to experience unemployment or other interruptions throughout their working lives resulting in lower pension contributions and lower income in old age. Health prospects are also likely to be worse than others.

2.3.1 Interrupted work histories from unemployment and childcare; lower paid work from poor educational achievement: associated long-term costs

Individual: Over a lifetime the individual experiences loss of lifetime earnings; lower levels of consumption; fewer holidays; stress; living in a poorer neighbourhood; greater risk of ill health; lower pension provision; and lack of provision for nursing care.

Resource or opportunity costs: The main resource cost is the continued lost productivity although there could be continued excess health and social care requirements.

Public finance costs: In retirement public sources will have to fund Income Support payments to supplement the state pension; payments for residential and nursing care and contributions to voluntary sector costs. Also there could be a loss of taxation from occupation pensions compared to the non-NEET group.

2.3.2 Continuing poor health and disability: associated long-term costs
Some people suffer throughout their lives from disabilities, others may have periods of disability and some of those in poor health will die early.

Individual: The disabled individual experiences pain, stress, lower earnings, and the inability to fulfil hopes and hence may have lower quality of life.

Resource or opportunity costs: The resource costs occur through lost productivity from poor health or disability.

Public finance costs: Public finance costs are incurred through health and social services costs, benefit payments, loss of tax and NI contributions; pensions, and care costs.

Section 3: Incidence values: sources and assumptions

The aim in this costing exercise is to estimate a cost of being NEET at age 16-18. The costs are defined as the excess costs of being currently in the NEET group compared to the hypothetical situation that this same group of individuals had been able to experience the same lives as their contemporaries who are not NEET at age 16-18. The first task in this section is to estimate the numbers in this cohort.

The second task is to estimate the numbers of those within the defined total who are in the various sub-groups described in Section 2. However, people can have a number of different problems associated with being NEET. For example, people who are drug-dependent are over-represented amongst the NEET group. Drug dependency results in unemployment, lower earnings, health costs and crime costs. The previous section has outlined the costs incurred for each separately. Identifying the numbers within in each group and then estimating all the listed costs could involve double counting of the same effects. To avoid double counting, a hierarchy of costs was established.

The hierarchy was designed to ensure the total estimate was as robust as possible. Data was not available which allowed for the complete separation of all effects, so that for example, the number unemployed could be subdivided amongst the NEET group to define those with and without drug dependency. Therefore the main effects of employment status, that is being unemployed or inactive, were considered as the first stage. However, this employment status is defined at a point of time and individuals may not have the same experience throughout the ages 16 to 18 and indeed may have some spells of employment. Having no qualifications means that even when such people are in work their earnings are lower than others who had experienced spells of unemployment. This lower earning capacity is regarded as the additional cost of low educational achievement over and above unemployment spells.

Numbers in different groups, for example those committing crimes, were used only to estimate additional impacts relevant to this sub group. These figures would include drug related crimes and therefore no additional criminal impacts of being drug dependent were assumed. The additional impact of drug dependency was therefore confined to health impacts.

The only exception to this approach was teenage mothers where some attempt was made to separate all impacts including those of future employment.

The impact of the hierarchy is that costs under different headings reflect the total impact for the cohort, unemployment costs involve the total for the cohort, crime costs involve all the crime cost for the cohort, drug dependency costs only cover the additional health costs. Thus this costing exercise cannot be used for targeting the costs of specific groups. Much more data than is presently available would be required to be able to allocate costs to different groups within the NEET cohort.

The process for determining the incidence values and the assumptions involved are set out in this section. The discussion draw on the accompanying literature review, Coles *et al.* (2002). That is estimates are provided for the numbers within the NEET cohort with the characteristic, and additional effects of being NEET are estimated. For each cost outlined in Section 2, after the relevant information from the literature is outlined, the choice of incidence value is highlighted.

A necessary starting point is the determination of the total numbers of 16-18 year olds who are NEET in England.

> For the purposes of this paper we will use the DfEE (2000) estimates of the population of socially excluded young people as those who are NEET at ages 16,17 and 18 in England from Labour Force Survey (LFS) and administrative data, 157,000 which is 8.5 per cent of all 16-18 year olds AT THE END OF 1999.

Other estimates of the numbers of 16-18 year olds NEET can be higher than the DfEE estimate. It is, however, a recent and conservative estimate. For a summary discussion of the estimates of the population of NEET young people see Appendix 1 and a fuller exploration of the issues see Coles *et al*. (2002).

As seen in Section 2, the costs of being NEET at this age relate to unemployment, underemployment, poor health, substance abuse, crime and so forth. The additional impact of being NEET on these costs is required. A proportion of the whole 16-18 year old cohort is underemployed, for example, but a higher proportion of those in the NEET population are in this position. The cost of underemployment because of being NEET is based on the **additional** proportion of the NEET population who are underemployed as a result of poor educational qualifications. For example, if five per

cent of 16-18 year olds who are not NEET have no qualifications and 20 per cent of NEET 16-18 year olds have no qualifications the excess numbers among the NEET population suffering the consequences of poor educational qualifications is 15 per cent of the NEET population. This number would be the incidence value for the costs associated with poor qualifications and would be used in estimating the total costs of NEET 16-18 year olds. This section continues by comparing the proportions of those NEET and not NEET for each of the different cost categories.

Where possible the primary data source is identified along with the published reference from which the analysis is taken. A number of additional data analyses were conducted for this project and the authors and data used is referenced. For clarity the primary data sources are given in italics.

In order to determine the excess numbers in the NEET group of any specific sub group we need the numbers available for both the NEET population, and the non-NEET population. In some cases these are available but in others there may only be information for the whole population of 16-18 year olds. In these cases some assumptions will be necessary to provide the necessary numbers for those in the NEET population. For each cost category the numbers of all 16-18 year olds, the numbers non-NEET and the numbers NEET are listed (where available) so that the estimate of the excess number of the NEET group associated with each cost category can be set out in the box at the end of each section.

Part 1 sets out the incidence values for current costs, part 2 for medium-term costs and part 3 for long-term costs.

3.1   Current costs

For this section, incidence values are considered in the groups of the NEET population in the same order as in Section 2.

3.1.1   Underemployment

This section refers to the underemployment of those who do not reach their full potential in terms of earning power (and other non-monetary rewards). Often underemployment is a result of having low educational qualifications. For the purposes of this paper it is treated solely as a result of educational underachievement. Educational underachievement is defined for this project as having no qualifications at the end of compulsory schooling. Particular groups are affected: care leavers; people from difficult to let estates; truants; those excluded from school; from ethnic minority backgrounds, except Indian and Chinese. The

trends in the proportions with no qualifications, although falling since the late 1980s, are now levelling out and the gap between those who achieve in school and those who do not is widening (Payne,1999).

All 16-18 year olds: The information available on the educational underachievement of all 16-18 year olds is that 1 in 16 (6 per cent) of young people (nearly 40,000) leave school each year without any qualifications. DfEE (1999) (*Primary data source*: *Exam results*).

Non-NEET: Two per cent of the Non-NEET group leave school without qualifications, DFEE (2000). (*Primary data source: YCS cohorts 8 and 9, end 1999.*) Another source (Payne, 1999) estimates that four per cent have no educational qualifications. (*Primary data source*: *YCS cohort 8,1998*).

NEET: The most recent estimate is that 22 per cent of the whole NEET group had no qualifications, DFEE (2000). (*Primary data source: YCS cohorts 8 and 9 end 1999.)*

Based on the 22 and two per cent difference (the most recent estimate) between those NEET and non-NEET with no qualifications in the then DfEE estimates we will assume that the excess percentage of those with no qualifications among the NEET group is 20 per cent. Thus the additional numbers of underachievers among those NEET is 20 per cent of 157,000= 31,400 based on DfEE estimates at END OF 1999. Sixty per cent of these will be unemployed and 40 per cent in the inactive group, see below for the sources of this breakdown.

3.1.2 Care leavers

All 16-18: In 1998 3,600 young people left care at age 16, which was 46 per cent of all 16-18 year olds leaving care in that year. Therefore the total numbers of 16-18 year olds leaving care in 1998 can be estimated at 7,826. Compared with six per cent of all school leavers, 75 per cent of those leaving care had no educational qualifications (Department of Health, 1999).

Non-NEET: No specific information on the numbers of care leavers in the non-NEET population was found in the literature.

NEET: No specific information was found in the literature on the numbers in the NEET group who were care leavers.

> The main effects of leaving care will feed through educational underachievement, teenage pregnancies, homelessness, substance abuse, and crime. For these reasons and because of a lack of information, care leavers will not be treated as a separate group.

3.1.3 Unemployed

All 16-18: Among all 16-18 year olds 6.9 per cent were unemployed according to analyses of the Family Resources Survey (FRS) 1997/98 (Hutton, 2000), and eight per cent were unemployed according to special analyses of the Survey of English Housing (SEH) 1998/99[1]. Seventy-three per cent of men, and 55 per cent of women were NEET entirely due to unemployment according to analysis of Cohort 8 of the YCS reported by Payne(1999). Particular groups affected were: men, ethnic minorities, and those from deprived areas. The trend in unemployment among this age group is falling.

Non-NEET: No member of the non-NEET group is unemployed at the end of 1999 by the definitions used to define the cohort.

NEET: Sixty per cent of the NEET group were ILO unemployed at the end of 1999, DFEE (2000). (*Source*: *Cohorts 8 and 9 YCS*). It compares with an estimate of 70 per cent of the NEET group being ILO unemployed in special analysis of the FRS 1997/98 (Hutton). According to analyses of the SEH 1998/99 (Burrows) a further estimate was that 69 per cent of the NEET group was unemployed. However, the DfEE figure of 60 per cent has been chosen being drawn from the same source as the overall cohort estimate and it is the most recent estimate. Where several figures exist the most recent estimate is chosen in the rest of this section.

> *Based on the DfEE estimates that 60 per cent of the NEET group was ILO unemployed the number of unemployed young people in the NEET group was estimated as 94,200 at the end of 1999. We assume that the breakdown between 16-17 year olds and 18-year old men and women is the same as the overall NEET proportions. Thus the total consists of:*
>   16-17 year olds : 55,250
>   18 year old men: 0.67 x 38,940=26,100
>   18 year old women: 0.33 x 38,940=12,850.

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[1] Burrows undertook analyses of the Survey of English Housing (SEH) 1998/199 for this project. The SEH was made available to us by the Office for National Statistics and the then Department of Environment,Transport and the Regions.

3.1.4 Inactive/out of the workforce

Those who declared themselves inactive or out of the labour market included all who reported they were looking after a family, and those with a long-term sickness or disability. Women were most likely to be in this category. It is a more tightly defined category than 'economically inactive' which includes those in full-time education who are not in or seeking employment.

All 16-18: The proportions reporting their employment status as 'inactive' were: 1.5 per cent according to special analysis of the FRS 1997/98 (Hutton); and three per cent (according to analyses of the SEH 1998/99).

Non-NEET: No member of the non-NEET was in the 'inactive' category.

NEET: The most recent estimate is that 40 per cent of the NEET group were inactive, including those sick and disabled, DFEE (2000). (*Primary data source: YCS cohorts 8 and 9, end 1999*) This compares with 14.9 per cent of the NEET group in the FRS 1997/98 analysis (Hutton, 2000), and with 26.4 per cent the NEET group in the SEH 1998/99.

Within the NEET population the number inactive is based on 40 per cent of 157,000 NEET at the end 1999, which equals 62,800. Seventy-five per cent of this group are women, i.e. 47,100, including young mothers and most young carers. The group also includes 15,700 who are long-term sick or disabled or otherwise out of the labour market, some of whom will also be women.

We assume that the breakdown between 16-17 year olds and 18-year old men and women is the same as the overall NEET proportions.

3.1.5 Teenage mothers

All 16-18: Each year there are 56,000 births to this age group (SEU, 1999). Groups which are particularly likely to have higher proportions of young mothers are: those from Pakistani, Bangladeshi and African Caribbean backgrounds; care leavers, truants, those excluded from school, and those from deprived neighbourhoods.

Non-NEET: One per cent of women who are in the non-NEET group were mothers, DFEE (2000) (*Primary data source: YCS cohorts 8 and 9 end 1999.*)

NEET: Among the group of NEET women age 16-18, 22 per cent were mothers DFEE (2000). (*Primary data source: YCS cohorts 8 and 9 end 1999.*) This compares with a third of young women in this age group being parents or carers as reported in SEU report (1999)[2] using the LFS. The then DFEE estimate defines more directly the number of teenage mothers and will therefore be used as the basis for the incidence values of the excess proportion of teenage mothers in the NEET group.

The excess of teenage mothers in the NEET population, based on DFEE estimates of 22 per cent in the NEET and one per cent in the non-NEET groups will be assumed to be:

21 per cent of NEET women (55% of 157,000) = 18,134 at end 1999.

3.1.6 Disability

All 16-18: One in five of the whole cohort have special educational needs (SEN) but fewer than one in six have been statemented (SEU, 1999). There is a trend of an increasing number of young people with SEN. In addition, ten per cent of 16-19 year olds have a current long-term disability (SEU,1999). These figures were derived from data published by the Office for National Statistics (1999), and the LFS. There is no information on trends (SEU,1999).

One per cent of all 16-18 year olds report their employment status as sick/disabled (SEH special analysis). At age 16, 11 per cent of those reporting a disability or health problem were NEET compared with six per cent of the non-disabled. At age 18, 28 per cent of disabled young people were NEET compared with 12 per cent of those without a disability (SEU, 1999). A further estimate from the LFS suggests that 16 per cent of disabled young people aged 16-18 are NEET compared with nine per cent of those who are not disabled and 9.6 per cent of the whole age group. (*Source*: *LFS special analysis, Bivand*[3]*).*

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2 Throughout the SEU report (1999) refers to 'Bridging the Gap: New Opportunities for 16-18 year olds Not in Education Employment or Training' (see references).
[3] Bivand undertook special analyses of the LFS for this project.

Non-NEET: None report themselves as unable to work, although nine per cent report having a long-standing illness. (*Source*: *FRS analysis, Hutton, 2000*).

NEET: Six per cent of NEET young people report themselves as unable to work and 15 per cent report having a long-standing illness. (*Source: FRS analysis, Hutton, 2000*). It was considered that the figure of an additional six per cent being disabled and unable to work from the analysis of the FRS was the most robust estimate for the cost analysis.

The excess numbers with long-standing illness in the NEET group compared with the non-NEET group was 6 per cent of 157,000=9,420 at end 1999.

Those who describe themselves as unable to work should be fully counted as a specific group within the NEET population, separate from the inactive group. Hence we assumed that this subgroup would have 1.5 years out of the labour market on average over the years 16-18. There were 6 per cent more in the NEET than non-NEET group. That is six per cent of 157,000=9,420 were unable to work at end 1999.

However, long standing illness and inability to work are not results of being NEET and are therefore not included in the cost estimates.

3.1.7 Young carers

The only information on young carers is that there are between 10,000 and 25,000 young carers (Walker (1996)). Half are aged 11-15 (Dearden and Becker,1998). Therefore 5,000 –12,500 could be assumed to be aged 16-18.

Because of the lack of information on the numbers of young carers in the NEET group we have not included them as a separate group for costing but assumed that the impact is directed through lack of qualifications and being out of the labour market. Young carers are therefore considered to be among those with no qualifications at 16 and in the inactive group.

3.1.8 Poor health

Information on the health of young people is difficult to obtain, so to obtain numbers for this exercise a member of the research team in the University of York (Julia Johnson) undertook special analyses of the British Household Panel Study (BHPS)[4]. The BHPS is a nationally representative study of households in Britain and includes individual interviews with all members of the household aged 16 and over. It asks whether people feel that their health has been very good, good, fair, poor or very poor. Thus it provides information on self-reported health status.

All 16-18: Among all 16-18 year olds four per cent reported having poor or very poor health. (*Source: special analyses of BHPS 1991-1998.*)

Non-NEET: Similarly, four per cent of the non-NEET group reported having poor or very poor health. (*Source: special analyses of BHPS 1991-1998.*)

NEET: Among the NEET group of young people 6 per cent reported having poor or very poor health. (*Source: special analyses of BHPS 1991-1998.*)

Early death: There was no data on early deaths for this age group.

Hence two per cent more of the NEET compared with the non-NEET group reported poor health. Thus the excess numbers in the NEET population with poor or very poor health is two per cent of 157000=3,140 at end 1999.

3.1.9 Mental illness

All aged 16-18: There is little information on mental illness for this age group. For example although at age 5-15 it is estimated that 10 per cent have mental illness (*Source: ONS, 2000*) the only other information is for all aged under 20, of whom 20 per cent are estimated to have mental illness. (*Source: Mental Health Foundation, 1999*).

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[4] Johnson undertook special analyses of the BHPS for this project. We acknowledge the receipt of the data from The Data Archive at the University of Essex, but the results of the analyses are solely our responsibility.

There was no data to link NEET with mental illness/depression, and the literature does not support a particular association with current mental illness, although an association may emerge later in the medium-term.

3.1.10 Suicide

All age 16-18: Some information is available on suicides among the young people although not for the precise age group, for example 600 (10 per 100,000) aged 15-24 commit suicide each year in England and Wales, and there are 20,000 in hospital each year because of self-harm. Trends in suicide and self-harm have been generally rising. The particular groups likely to be affected are boys, care leavers, persistent offenders, and those from deprived areas or who are homeless. Girls are more prone to self-harm than suicide (Department of Health, 1998; Hawton and Fugg, 1992).

No data emerged to enumerate excess suicides of the NEET population.

3.1.11 Substance abuse

Drugs

All 16-18: In England and Wales, results from the British Crime Survey suggest half (i.e. more than one million) of all 16-19 year olds have tried drugs (Ramsay and Partridge, 1999) but only a small proportion have taken class A drugs. This compares with the three per cent who were dependent on drugs estimated in Meltzer *et al.* (1995). This source reported that the trend for drug use was levelling off except for cocaine use. The particular groups involved with drug use are older boys, truants, those excluded from school, care leavers, those from deprived areas, and homeless young people. For estimating costs, however, it is those that are dependent that are likely to incur costs.

Non-NEET: Among the non-NEET group analysis from the Youth Lifestyles Survey suggests 45 per cent have ever used drugs (SEU report, 1999).

NEET: A higher proportion of the NEET group, 71 per cent have ever used drugs according to analysis of the same YLS survey, SEU report (1999). The proportion

was even higher in a small qualitative study: 24 out of 28 use drugs (Istance *et al*., 1994). However according to another source, 40 per cent were recorded as drug users, Newburn (1999).

A considerably smaller proportion of the NEET group, 10 per cent, were estimated as *drug dependent* according to the SEU report (1999), from Meltzer *et al.* (1995).

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In estimating the excess drug use among the NEET population there is no specific information on the non-NEET group but we know that 3 per cent of all 16-18 year olds are drug dependent. We assume that drug dependence is lower in the non-NEET group, say two per cent. Thus comparing the NEET with the non-NEET population we compare ten per cent with two per cent. So eight per cent of the NEET population can be counted as excess drug users, that is eight per cent of 157,000=12,560 at END 1999.

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Alcohol abuse
All 16-18 year olds: The best information available on alcohol use among this age group from the British Crime Survey is the estimate that one in twelve 16-17 year olds drink alcohol three or more times per week (SEU, 1999). There are signs of the trend levelling off for young men, but still rising for young women. However the main groups involved are male and white.

Non-NEET: There was no specific information on the non-NEET group.

NEET: There was no specific information on the NEET group.

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There was no information on alcohol abuse for this age group and circumstances. Thus the cost of alcohol abuse could not be estimated.

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Smoking
All 16-18: About 1 in 3 (over 700,000) 16-19 year olds smoke regularly and particularly young women, Goddard and Higgins (1999). At present the trend is not rising.

Non-NEET: There was no information on smoking specifically for the non-NEET group.

NEET:

There was no information on smoking for the NEET group, except possibly for lone parents. Thus the cost of smoking could not be estimated.

3.1.12 Crime: victims and offenders

All 16-18 year olds: According to the 1998 British Crime Survey, a quarter of all violent crime is committed against young men (Mirlees-Black *et al*., 1999). This figure has dropped to 20 per cent according to the 2000 British Crime Survey (Home Office, 2000). However, 15 per cent of young women aged 16-19 reported having been assaulted by a partner (Mirlees-Black, 1999). Overall 1 in 6 young people aged 14-25 is the victim of a violent offence each year (Graham and Bowling, 1995). Groups particularly likely to be victims of crime are: young men; disabled people; those living in areas of physical disrepair and households headed by young people. There has been a small decline in the numbers of victims since mid-1990s. A third of men have a criminal record by age 30 and a quarter of offenders are aged under 18 (SEU, 1999).

At age 16-17, young men are most likely to commit violent and property crimes (19 per cent of male offences); and criminal damage (8 per cent) whereas women are most likely to commit property offences (17 per cent of offences) violence (8 per cent) and criminal damage (2 per cent), according to the Youth Lifestyles Survey, 1998/99.

Groups particularly likely to be offenders are Afro-Caribbean men. The peak age for offending has risen from 15 in 1986 to 18 more recently in 1994 (SEU, 1999).

There are 11,500 15-21 year olds in custody and three-quarters will be re-convicted within two years (SEU, 1999). There are rising numbers in prison; the imprisonment rate has risen by 50 per cent since the early 90's. The particular groups likely to be imprisoned are: homeless young people, care leavers, those excluded from school, with no qualifications, drug abusers, those who have been abused, fathers or expectant fathers.

Much crime is drugs related, particularly crime yielding relatively small amount of money such as shop lifting and credit card fraud. Although the amounts and costs are relatively small, there are large numbers of such crimes.

Non-NEET: There was no specific information on crime among the non-NEET group.

NEET: Three quarters of males aged 16-17 who are charged and appear in Youth Court are NEET. (*Source: SEU report (1999), figures taken from Home Office, Survey of Police Arrests and their Outcomes, 1993/4.*)

Although, as the paragraphs on crime among all 16-18 year olds show, there is a considerable literature on youth crime there is surprisingly little that is specific to young people who are NEET. The only information we could find on the numbers of NEET young people who are involved with crime is in DfES unpublished estimates, which note that twice as many offenders are NEET as non-NEET. It also provided information on the numbers of residential and commercial burglaries and car crimes. Although young people are mainly involved in petty crime such as shoplifting numbers are not available and the crimes listed below are more likely to involve substantial costs.

> Using population of 157,000 NEET (END 1999) DfES estimates yield:
> 5524 commit residential burglaries
> 5493 commit commercial burglaries
> 5363 commit car crimes.

3.1.13 Minority ethnic groups

Although there was a higher proportion of black, Pakistani or Bangladeshi young people in the NEET group, the consequences and costs were not different from the overall NEET population.

3.1.14 Homelessness

All 16-18 year olds: There are a variety of estimates of homelessness among young people and information about them. For example one source estimates that there are approximately 32,000 homeless 16-21 year olds (Murphy and Berrington, 1993). Alternatively, there are 20-30,000 homeless 16-17 year olds in England estimated by the Foyer Federation (quoted in SEU, 1999).

Many young people who are estranged from their families claim Severe Hardship Payments and some will be either homeless or on the margins of homelessness. One sources estimates that 100,000 16-17 year olds claim Severe Hardship Payments annually (Howarth *et al.*, 1998).

The numbers of homeless young people are increasing and the particular groups affected are African/Caribbean: half of all homeless people in London are African/Caribbean.

Non-NEET: One-third of homeless young people in London are in employment, education or training. (*Source: SEU report (1999) from Department of the Environment, Single Homeless People, 1993, and Safe in the City, 1999*.)

NEET: Two-thirds of homeless young people in London are NEET in SEU report, but there is no information of the number of NEET young people who are homeless.

> Data on the excess numbers of the NEET group who are homeless is uncertain therefore homelessness is not included in the cost estimates.

3.2. Medium-term incidence: those affected over the working years

For the medium-term impact of having been NEET at ages 16-18, the whole NEET group is considered together and is not split into those who were unemployed or inactive at age 16-18 as in the current cost estimates above. In the medium-term it is assumed that effects will depend just on the experience of being NEET and there will not be a differential impact between those who were previously classified as unemployed or inactive. Rather effects are divided into those of underemployment and unemployment. This is because there is no additional information on lifetime employment of those who were inactive at age 16-18 and therefore they will be included among those with no qualifications and unemployed.

3.2.1 Underemployment

The group who were NEET and had low or no qualifications are likely to have different working lives than those who were unemployed and NEET. The jobs they achieve are likely to be less secure and be paid less than those who were unemployed but had average qualification levels. Thus this group is costed separately from the unemployed. Estimates are required of the numbers and the impact on working history.

> The same excess numbers having no or low qualifications as those recorded in the current incidence section (see above) are used in the medium-term cost estimates.

Twenty per cent of 25-29 year olds with no qualifications were unemployed compared with five per cent of those with higher qualifications according to *Bridging the Gap*. Recent data from the Labour Force Survey shows that 16 per cent of all men of working age with no qualifications were ILO unemployed compared with an average of 7 per cent of all men (Labour Market Trends, 1999). This means that a percentage were likely to be unemployed for periods during their working lives. The costs of these episodes will be considered under unemployment. However, it means that the period of employment when they would be earning less than average is lower than the full 40 years of a working life. We assume that they have a working life of 30 years: the ex-NEET group are assumed to spend ten years out of the working life in unemployment (see below). These estimates could be improved by using a full labour market model.

3.2.2 Unemployment

Ex Non-NEET at 16-18: Ten per cent of both men and women were unemployed at age 21 according to the 1970 Birth Cohort Study (BCS70). (*Source: SEU,1999*).

Ex-NEET at 16-18: At age 21 the proportion of young men who did not participate for six months or more was 44 per cent and for young women was 68 per cent. (*Source: SEU, 1999*). From other figures, ex-NEET women were found to be five times more likely to be unemployed at age 21 and men three times as likely to be unemployed at age 21 as those not NEET at 16-18 (Bynner and Parsons, 2000). (*Primary Source*: BCS70.) Thus we estimate that 50 per cent of women and 30 per cent of men were unemployed among the ex-NEET group (assuming 10 per cent of the non-NEET population is unemployed at age 21).

The latter is likely to be a peak rate of unemployment, and it is likely to decline over the middle years of a working life, to 20 per cent between ages 25-45, say, and rise to 30 per cent after this. Although differences between men and women exist at age 21, these differences may decline over a working life. Unemployment may occur at different ages for men and women. For a more accurate estimate more data, analyses and modelling are required.

> As a simplification to give an order of magnitude of the costs, we will assume an excess proportion of 25 percentage points being unemployed, for both men and women, among the ex NEET group throughout the working life.

3.2.3 Early motherhood

Ex-Non-NEET at 16-18: Ten per cent of the non-NEET group women had children by age 21 and five per cent had two children by age 21. (*Source: BCS70 as reported in SEU, 1999*).

Ex-NEET at 16-18: A much higher proportion of women in the NEET group, 60 per cent, had children by age 21, and 40 per cent had two children by age 21 (*Source: BCS70 as reported in SEU, 1999*).

> Thus we estimate that the excess numbers of early mothers among the ex-NEET group is 50 per cent of NEET women = 43,175

3.2.4 Poor health

Ex-non-NEET at 16-18: Among those who had not been NEET at age 18, ten per cent of men and 15 per cent of women were in poor health at age 21. (*Source: BCS70 as reported in SEU, 1999.*)

Ex-NEET at 16-18: By comparison, in the group which had been NEET at age 16-18, 15 per cent of men and 25 per cent of women were in poor health at age 21. (*Source: BCS70 as reported in SEU, 1999.*)

> The excess numbers with poor health having been NEET are estimated as:
> 5 per cent of NEET men=3,533
> 10 per cent of NEET women=8,635

Early deaths: There was no data on early deaths specifically for this age group.

Mental illness/depression

Ex-non-NEET at 16-18: Among those who had not been NEET at age 16-18, ten per cent of men and 25 per cent of women reported mental illness/depression at age 21. (*Source: BCS70 as reported in SEU, 1999.*)

Ex-NEET at 16-18: Higher proportions reported mental illness/depression at age 21 among those who had been NEET at age 16-18: 25 per cent of men and 35 per cent of women. (*Source: BCS70 as reported in SEU, 1999*).

The excess numbers with mental illness having been NEET are estimated as:

15 per cent of NEET men=10,598
10 per cent of NEET women=8,635

Suicide: There was no data on numbers of suicides specifically for this age.

3.2.5 Substance abuse

About ten per cent of all young men aged 18-24 were reported as alcohol dependent. (*Source*: *Meltzer et al. 1995.*)

Ex-non-NEET at 16-18: No information was available on the alcohol dependency of those who had been in the non-NEET group at age 16-18.

Ex-NEET at 16-18: The NEET group had higher level of drug use in the current period (age 16-18) and this may lead to higher levels of drug dependency in the medium-term. There is little data however to estimate these impacts. Similarly some of those who are drug dependent in the current period will stop misusing drugs. There is some data on the outcomes of those entering treatment with a common finding being that one third get better, one third remain drug dependent and one third will die prematurely. Using these percentages on those estimated to have entered treatment in the current period would yield estimates as follows:

The total entering treatment in the current period is estimated as 1313. Hence in the medium-term it can be estimated one-third improved (438); one third remained drug dependent (438); and one third died (438).

3.2.6 Crime victims and offenders

Ex-non-NEET at 16-18: Information on offending is available for the age range 17-30 which includes 17 and 18 year olds who should be considered within current costs of 16-18 year olds. From the Youth Lifestyle Survey, at ages 17-30, some 11 per cent

of men and three per cent of women were involved in crime. Further information on the general probability of offending based on a number of different risk factors suggests that two per cent of those with no risk factors become offenders (*Source: see Flood-Page et al. in accompanying literature review, Coles et al., 2002*).

Ex-NEET at 16-18: Involvement with crime for those who were NEET age 16-18 continues at a higher level than for those who were not: 29 per cent of men and eight per cent of women who had been NEET at age 16-18 were involved in crime at ages 17-30 from the Youth Lifestyles Survey, 1998. According to Flood-Page *et al.*, fifty-two per cent of young men with four of the various risk factors and 30 per cent with three of the various risk factors are likely to offend. It is fair to assume that having been NEET at age 16-18 increases the number of risk factors.

> From the information above we estimate that the excess numbers still involved with offending behaviour, having been NEET, is 28 per cent (assuming 3 risk factors) of ex-NEET young men = 19,782*.*

3.3. Long-term incidence: those affected into retirement and the next generation

3.3.1 Effects on pension receipt

According to information from the then Department of Social Security (DSS), now the Department for Work and Pensions, 76 per cent of recently retired couples receive income from occupational pensions and 58 per cent of all single pensioners receive income from occupational pensions (DSS, 1999). These are likely to be the most secure and wealthier pensioners.

Those who have not managed to contribute fully throughout their working lives are likely to receive income from means-tested benefits to supplement their pensions, hence 22 per cent of recently retired couples receive income-related benefits and 48 per cent of all single pensioners receive income related benefits (DSS, 1999).

Ex-non-NEET at 16-18: The information provided is not specific to those who were non-NEET at age 16-18.

Ex-NEET at 16-18: If 22 per cent of all pensioner couples are in receipt of income related benefits, the likelihood of ex-NEET pensioners being on low incomes and

qualifying for income related benefits is perhaps 20 per cent higher, say 42 per cent. There is no information to say exactly how much more likely those who were NEET at age 16-18 are to be in receipt of means–tested benefits in retirement than those who were not NEET at that age. Thus in order to provide an estimate for the costing exercise we have assumed a figure of 20 per cent. It could be lower or higher. Similarly the likelihood of ex-NEET single pensioners being in receipt of income-related benefits is assumed to be 20 per cent greater, say 68 per cent.

> We will assume that pensioners are in couples until age 75 and are single pensioners after this age. The excess receipt of income-related benefits among pensioners who were NEET at age 16-18 will be assumed to be 20 per cent of couples and single pensioners.

3.3.2 Loss of tax of pension income

Other ex-NEET people, although not receiving income-related benefits are unlikely to have the same level of pensions as others. This implies there will be a loss of tax income on pension income. This is another public finance impact as pensions are in the form of deferred savings and loss of pension income does not in itself involve a loss of resource. We will assume that the excess receipt of lower than average pensions is a further 20 per cent of single and couple pensioners.

Because of the earlier mortality of the ex-NEET group these may be an overestimate of the incidence of lower pensions and payments of benefits.

3.3.3. Intergenerational impacts

The lifetime impact of NEET may have a number of longer term intergenerational impacts on their families. Unfortunately no data could be found to estimate these effects.

Section 4:   Unit costs: Sources and assumptions

In this section the assumptions about the unit costs and the periods to which they apply are set out. For example benefits are given as a weekly unit cost. So it is necessary to estimate the number of weeks that benefits are payable.

From the previous sections it can be seen that there are some common items across many of the different groups. In this section the items to be costed are considered and the group to which they may be relevant are given in parenthesis. The aim is to find a consistent set of unit costs in 2000 prices, in order to estimate the overall cost of the NEET population 16 –18, currently and into the future. As in previous sections Part 1 addresses current costs, Part 2 considers medium-term costs and Part 3 sets out long-term costs.

4.1.   Costs for current 16-18 year olds

4.1.1   Underemployment resulting from educational underachievement

Educational underachievement leads to a poorer employment record than would have been the case if the individuals had completed more education or training. Economic research has estimated the rates of return to education but less work has been done on the impact of vocational qualifications. Such studies relating earnings and educational achievement often use data from the LFS.   The costs of underemployment can be estimated from the difference in earnings obtained by those with poor qualifications compared with the earnings of those with average qualifications.   It is more problematic to link unit cost data to the psycho-social impacts of underemployment, particularly for the individual.

Foregone earnings

One of the measures of the impact of educational underachievement is the difference in earnings achieved by such people compared with the earnings of those with average qualifications.   To estimate the loss in earnings for educational underachievers we set out average earnings for the whole population and compare them with the earnings of those with low educational achievements. This gives an indication of the value of the lost output.

Average gross weekly earnings for full-time employees at April 2000 for Great Britain from the *New Earnings Survey 2000* (National Statistics) are as follows:

Male manual:	£343.90;	Non-manual:	£533.90;	All:	£453.30
Female manual	£227.90;	Non-manual:	£357.50;	All:	£337.60

Age under18:

Male manual:	£139.60;	Non-manual:	Not quoted;	All:	£141.70
Female manual	Not quoted;	Non-manual:	£138.00;	All:	£141.40

Age 18-20:

Male manual:	£202.70;	Non-manual:	£208.00;	All:	£204.90
Female manual	£172.70;	Non-manual:	£188.30;	All:	£184.60

Table 1: Gross earnings (£) per week, by highest qualifications by age Spring 2000, UK, Source: LFS

Age	No qualifications	< GCSE grade C
16-24	100	180

Source: National Statistics Labour Force Survey, Quarterly Supplement, Spring 2000.

> We will assume that average earnings are £140 per week for both men and women aged 16 and 17, and £200 for men and £185 for women aged 18 at April 2000. Those with no or low qualifications are assumed to earn £100 at age 16 and 17 and £140 at age 18. Thus the earnings gap is £40 per week at age 16 and 17 and £60 for men and £45 for women at age 18. For those who are NEET and unemployed with no qualifications we will assume that 16-17 year olds experience this differential for 21 months, and 18 year olds for 9 months. For those who are NEET and inactive with no qualifications we assume that they will experience this differential for 15 months for 16-17 year olds and for 4 months for 18 year olds.

Tax foregone

As a result of lower earnings NEET young people pay lower taxes and the loss of tax revenue is calculated on the earnings differential outlined in the box above. It consists of a loss of National Insurance Contributions, and loss of direct and indirect taxes paid.

National Insurance Contributions

The marginal rate for the employees' contribution is ten per cent and for the employers' contribution is 12.2 per cent (Child Poverty Action Group, 2000). This yields the following figures for the weekly costs of lost contributions.

Lost contributions for	16-17 year olds are	10% of £40 = £4 employees' contribution
		12.2% …… = £4.88 employers' "
………………………..	18 year old men are	10% of £60 = £6 employees' "
		12.2% …… = £7.32 employers' "
…………………………	18 year old women are	10% of £45 = £4.5 employees' "
		12.2% …… = £5.49 employers' "

Direct taxes

For low incomes, the average rate of tax on incomes ranges from seven per cent on £7,500-£8,999 per annum to 11 per cent on incomes of £10,000-14,999. (*Source: Inland Revenue statistics as reported in Social Trends, 2001*).

> We will assume a marginal tax rate of 11%. So for 16-17 year olds the tax loss is £4.40, and for 18-year old men and women it is £6.60 and £4.95, respectively.

Indirect taxes

In 1998/99 indirect taxes accounted for 32 per cent of disposable income for households in the lowest fifth of equivalised, that is adjusted for household composition, household income distribution (Social Trends, 2001). On this basis we will assume that the indirect tax loss is 32 per cent of the income after the deduction of National Insurance contributions and direct taxes:

For 16 and 17 year olds it is 32 per cent of £(40-4-4.40)=10.11

For 18 year old men it is 32 per cent of £(60-6-6.60)=15.17;

For 18 year olds women it is 32 per cent of £(45-4.50-4.95)=35.55

4.1.2 Unemployment

Unemployment has a cost to the individual, resource costs and impacts on public finance. The ideal would be to obtain some estimate of the excess unemployed weeks across the different groups (educational underachievement, unemployment and those out of the workforce). The costs to the public sector involve Jobseeker's

Allowances (JSA). From a resource aspect the cost is in terms of lost productivity to the economy, usually estimated as forgone earnings. However, there is a debate about the nature of productivity lost when there is general underemployment in the economy.

Duration of unemployment
The NEET group has already been defined in terms of those who were unemployed and those inactive. This definition refers to a point in time, end of 1999, for the cohort age 16-18 but individuals in this cohort may not be unemployed for the whole three years between ages 16 to 18 years. To estimate costs of unemployment, in addition to the numbers in the unemployed group we need to estimate the average length of time they are unemployed age 16-18. The following table constructed using data from the LFS gives the duration of unemployment by gender and age. About one half of young people have duration of unemployment of 3 months or less.

Table 2: Duration of unemployment for all 16-19 year olds, % of group by time period

	<3m	*3<6m*	*6m<1y*	*1<2y*
Male	48	21	18	9
Female	52	23	17	-

Source: Social Trends (2001)

Payne (2000) also notes that the most common length of time NEET is 6 months over the years 16-18.

> We will assume that those who are NEET at age 16-18 have longer durations of unemployment than others: 6 months over the years 16-18 compared with 3 months for those who are non- NEET. An alternative would be to assume that the non-NEET group are never unemployed over the period 16-18. In this case the difference in unemployment would be 6 months, but for this initial exercise we will take the more conservative estimate.

Benefits paid during unemployment
The information available on the level of payments of benefits to 16-18 year old unemployed people is as follows:

i) Income-based JSA: At age 16-17 is £31.45 per week

                            At age 18 is £41.35 per week

ii) Severe Hardship Allowance: As above - particularly for 16-17 year olds

iii) Bridging Allowances are paid while between jobs or training places at £15 per week.

These are the rates for 2000/1 from Welfare Benefits Handbook (WBH), Child Poverty Action Group (2000), but it is not clear how many claim each benefit and therefore to estimate average benefit payments claimed. From the Social Security Statistics (1999) figures suggest that at February 1999 15,000 people aged under 18 received an average weekly amount £35.10,

Average weekly amount for 18-24 year olds is £42.56.

iv) Housing Benefit (HB): 20,000 unemployed aged 16-19 with JSA receive housing benefit. The average payment of HB is £48.95 to unemployed on income-based JSA for all ages in August 1998 (DSS, 1999).

v) Council Tax Rebates: £11.66 on average for unemployed at 1997/98 from DSS, (DSS, 2000).

Overall benefit payments

In order to estimate the costs of paying benefits to current 16-18 year olds we need to estimate how these benefits interact to calculate the overall benefit payment. An alternative is to use information from surveys such as the Family Resources Survey, which gives information on the benefits received by people in various circumstances. For example, Hutton (2000) using the 1997/98 FRS estimated that the average benefit received by 16-17 year olds who were unemployed was £50.42 per week from non-means-tested and non-disabled benefits. For unemployed people aged 18-19 the average income-related benefit received was £107.18 per week, and the non-income related and non-disabled benefit was £14.26 per week.

In estimating the benefits of increasing basic skills such as numeracy and literacy, a recent paper used the IFS TAXBEN model based on the Family Expenditure Survey and the Family Resources Survey to estimate the combined payments of benefits. It also provided information on taxes and earning modelled over the life course (Bynner *et al.,* 2001).

Based on 1999 Social Security Statistics (February 1999), we will assume that the average weekly cost of benefits paid to unemployed 16-18 year olds is:

To unemployed 16-17 year olds: JSA @ £35.10 i.e £36.92 (uprated to 2000/01)

To unemployed 18 year olds JSA: @ £42.56 + Housing Benefit £48.95 (August 1998) + CTB £11.69(1997/98). When uprated to 2000/01 prices this equals £44.48+ 51.12+12.21=£107.81.

Foregone earnings

Using the same average earnings as set out for foregone earnings for underemployment, we will assume that each week out of the labour market results in a loss of £140 for both men and women aged 16 and 17, and a loss of £200 for men and £185 for women aged 18 at April 2000.

Tax foregone

The calculations for foregone revenue are based on the contributions and taxes lost to the Treasury because the unemployed are not earning at the rates set out in the box above.

National Insurance contributions

The rate for National Insurance contributions is quoted earlier:

For employees: 10 per cent of earnings between £67 and £535 per week.

For employers: 12.2 per cent of earnings above £83 per week (Welfare Benefits Handbook 2000/1).

The earnings assumption means that at age 16 and 17 the loss of NI contributions is 10 per cent of £(140-67) =£7.30 for the employees contribution; and 12.2 per cent of £(140-83)=£6.95 for the employers contribution, a total each week of £14.25.

At age 18 the loss of contributions for men is £13.3+14.27=27.57; and for women is £11.8+12.44=24.24.

Direct taxes

Based on the loss of earnings the following estimates the corresponding loss in tax revenue. The average rate of tax on low incomes vary. For the 16 and 17 year olds it is assumed income for the NEET group would be between £7,500 and £8.999 per year and therefore attract direct taxes of seven percent. For 18 year olds it assumed the expected income would be in the range £10,000-14,999 which attracts a tax of 11 per cent (Social Trends, 2001).

> We will assume that the tax foregone for 16 and 17 year olds is 7% of £140 =£9.80 per week; and for 18 year old men is 11% of £200= £22 per week; and for 18 year old women is 11% of £185= £20.35 per week.

Indirect taxes

In 1998/99 indirect taxes accounted for 32 per cent of disposable income for households in the lowest fifth of equivalised household income distribution (Social Trends, 2001).

> We will assume that each week the indirect taxes lost will be 32 per cent of £(140-7.30-9.80)=39.33 for 16 and 17 year olds; and for 18 year olds is 32 per cent of £ (200-13.30-22)=52.70 for men; and 32 per cent of £(185-11.80-20.35)=48.91 for women.

4.1.3 Inactive/out of the workforce

The inactive category mainly consists of women, so women's earnings are relevant in the estimation of the unit costs of inactivity. Within the inactive category there are three main groups, teenage mothers, disabled young people and a remaining group. We consider the remaining group first, followed by estimation of unit costs for teenage mothers, and finally for disabled young people.

For other inactive excluding teenage mothers and disabled
Foregone earnings: Assume the earnings gap is the same as for the unemployed and that they are out of the labour market for one year over the period 16-18 years. Thus they are in work for two thirds of this time, i.e. for 16-17 year olds for 15 months and for 18 year olds for four months.

Benefit payments: It is not clear what benefits they would be entitled to.

4.1.4 Teenage mothers

Teenage mothers will have longer periods out of the workforce and education. Separate allowance has been made for this in the figures and therefore the costs for teenage mothers can be viewed separately from other groups within NEET. This separation of costs was not possible for other groups, such as those drug dependent where the costs shown are just the additional costs not accounted for in the main cost categories.

Foregone earnings:

> We will assume that their level of earnings is the same as the unemployed, but will assume they are out of work for 1.5 years.

Benefit payments*:*

> Income Support for a lone parent aged 16-17 is £31.45; and at age 18 is £52.20 plus £26.60 for a dependent child under 16 plus £14.25 Family Premium. Housing Benefit is £58.49 plus the higher Housing Benefit Addition of £7.95. Some will receive a Sure Start maternity grant of £200. Child benefit for the first child is £15 per week. (Child Poverty Action Group, 2000)

Health costs for mother and child

In all sections on health costs we found no information on the costs of medication or aids.

> We assume a hospital stay for two days at a cost of £282 per day; plus 18 GP visits costing £15 each. For the cost of the Health Visitor, we assume 3 home visits at a cost of £24 per visit, and 12 local clinic visits at a cost of £48 per hour or £12 per visit (say). This yields a total cost of £1050 over the pregnancy and first year after birth. (Netten and Curtis, 2000; costs are for 1999/2000).
>
> Uprated to 2000/01: £1,050 becomes £1,086.

Social services costs for mother and child

The costs of social services for the teenage mother and child are difficult to estimate. They may not be necessary in some cases but may involve heavy casework in others.

We assume that a family support worker may be involved at some stage at a cost of £15 per hour and £25 per contact hour. We allow 5 visits and 5 hours office time. Thus the total cost per teenage mother is £200. (Netten and Curtis, 2000).

Uprated to 2000/01: £200 becomes £207.

4.1.5 Poor health

Although we have figures suggesting higher levels of poor health among NEET population it has proved more difficult to estimate the health care or employment consequences of such ill-health. No studies were identified where the consequences of ill-health were quantified in any way which could provide inputs into our costing framework. We therefore explored more general data in order to obtain some order of magnitude for estimates of likely impacts.

In general those aged 16-18 are low users of health care and therefore this group will not in the current period have a major NHS impact. Usage of all types of health service, GP visits, outpatient attendances and lengths of stay in hospitals are low especially compared to young children and the elderly. However, costs for this sub-group of NEET could be high individually. Indeed one hypothesis may be that any health care expenditure for long standing illness that prevents participation in work or training could be attributed to this group. However, few details are available on health service usage by age and employment category. The major source is the General Household Survey but figures are only reported for the broad age group 16-44. The 1998 survey does provide details of the different number of GP consultations per person per year by working status see Table 3.

Table 3:   GP consultations per person per year, 1998

Employment status/gender and age	Men (16-44)	Women (16-44)	Men (45-64)	Women (45-64)
Working	2	5	3	5
Unemployed	3	6	3	7
Inactive	4	6	7	7
All	3	5	4	6

Source: Bridgewood *et al.,* (2000)

These figures illustrate the potential impact of a combination of poor health and poor employment status, although ill-health may be a causal factor in both unemployment and inactivity as well as unemployment and inactivity being a causal factor of ill-health. Unfortunately there is no breakdown of health service usage by health status. It is very difficult therefore to give figures of the additional health care usage for this group.

In Table 4 figures are presented for the costs of different types of health care. It can be seen that hospital stays and paramedic unit ambulance rides are by far and away the largest individual item cost but obviously lower incidence of these costs would be expected.

Table 4:   Unit costs of health care

Type of health care	Costs per unit (£)	
	In 1999/2000 prices	*In 2000/01 prices*
GP consultation at surgery (9.6 minutes)	18	19
Prescription	15.67	16
Accident and emergency attendance	65	67
Generic Hospital Inpatient visit (per day)	223	230
Outpatient appointment	68	70
Inpatient day admission	70	72
Ambulance –Paramedic Unit, per journey	235	243
Ambulance – Emergency Ambulance, per journey	179	185
Ambulance – patient transport journey	37	38

Source: Netten and Curtis (2000).

The next step is to estimate some specific additional current costs of poor health. So for example taking the assumption that each additional NEET person in poor health accumulated just one extra GP consultation with a prescription over the estimated current period then the individual cost would be £33.67 (£34.81) per person, a total of £105,724 (£109,299) for the total 3140 additional NEET people in poor health. Prices up-rated to 2000/01 are in brackets. One extra GP consultation with an additional day spent in hospital would yield a per person cost of £256.67 (£265.35) per person and an additional £805,944 (£833,189) for this group. Another simulation could consist of the assumption of one additional GP consultation, one hospital stay

of three days, and one outpatient attendance which would yield a cost of £770.67 (£796.73) per person and a total of £2,419,904 (£2,501,737) for the NEET group. Higher use, say two additional GP visits, two extra days in a hospital and one emergency ambulance ride along with the one outpatient attendance would yield an average cost of £1,429.34 (£1,477.68) per person and a total of £4,488,138 (£4,639,9110) for the NEET group.

Using these simulations, the cost estimates range from £105,724 (£109,299) to £4.6 million. The important element of cost is days spent in hospital and this would be an area which merits further investigation. As also indicated these are average costs and some individuals may have much larger health care demands depending on the condition. The area also needs further research on the particular conditions that may be related to NEET and may be amenable to change from various policy actions.

For some conditions there may also be some change of premature mortality although for the total NEET group this is more relevant to the medium and longer term especially when related to factors such as smoking and drug dependence. For young adults the main causes of death are suicide and accidents. We have no incidence estimates related to NEET status. The cost of premature death can be estimated in a number of ways. For accidents the cost used by then Department of Environment, Transport and Regions (now Department of Transport, Local Government and the Regions) is based on willingness to pay methodology. The latest estimate is that each death costs £1,047,240 (1998 prices) (£1,096,590 in 2000/01 prices) see DETR (2000). From the statistics on mortality by cause, for motor accidents the average life years lost is 42 (Department of Health, 1998) Combining these figures gives a cost per life year saved of £24,934 (£26,109 in 2000/01 prices). Obviously premature deaths during the NEET period would add significantly to the resource costs but the number of premature deaths which could be attributed to NEET status and associated conditions is more likely to be significant in the medium and long-term.

Social services costs: Some additional social services costs may be incurred. Social worker involvement costs £83 per hour in 2000/02 prices of face-to-face contact (Netten and Curtis, 2000). However, with no clear incidence figures no additional community social care costs for long-term or acute sickness have been included.

4.1.6 Costs of substance misuse
There is evidence that a higher proportion of the NEET group are drug dependent compared to the non-NEET population. One of the major resource costs of drug

misuse is drug-related crime, including that committed to finance drug use. Other costs include the costs of treating the drug misuse and other drug related health care expenditure. Most data about drug dependency is derived from research on those in contact with drug agencies. These data suggest that those with severe drug problems have low employment rates. For individuals drug misuse has a number of effects especially on health and well-being. For injecting drug users there are major risks from diseases such as hepatitis which have long-term consequences.

There are only a few sources of data that can be used to estimate the cost of drug misuse for the NEET group. The main source of cost data for drug users comes from the National Treatment Outcome Research Study (NTORS), which interviewed 1,075 entrants to drug treatment agencies. This study provides estimates of treatment costs, health care and crime related costs for the year before the individuals entered treatment. However, crime and employment costs for the NEET group have been estimated already. Those who are drug dependent are likely to be over-represented and have higher levels of individual costs in these categories. This group does however have additional costs in terms of the treatment response and specific health care costs. The estimates from NTORS are £701 per person for health service costs and £1,836 for drug treatments of all kinds in the year before the NTORS study began. The total is £2,537 per person in 1995/6 prices (£2,898 in 2000/01 prices) (Healey *et al.*, 1998).

People will come forward to treatment for a number of reasons but it would normally be expected that entry to treatment would come some time after becoming drug dependent. This does not mean that the group not in treatment would have no costs but to estimate the total cost of all those not in treatment at the level of the NTORS study would be likely to overestimate the cost for the group. Those entering treatment for the first or second or subsequent times are likely to have developed chronic problems. Similarly some of the group may have successfully completed treatment and their costs fallen. To give an estimate it is assumed that the number who are likely to enter treatment in the NEET period would cost £2,537 a person.

Those entering treatment are registered in the Regional Drug Misuse databases for England. The figures suggest that 8,621 drug misusers aged between 15 and 19 entered treatment between April 1999 and March 2000, giving a total estimate of 5,173 for the 16 to 18 year old age group (Department of Health, 2000). From the total number of young people in this age group who are drug dependent this suggests some 10.45 per cent are in contact with drug treatment agencies. Using the excess incidence figure of 12,560 this suggests some 1,313 additional people in

the NEET group are in contact with services – a total cost of £3,331,081 (£3,804,729 in 2000/01 prices) for the period.

While it may be expected that there are additional problems with excess rates of alcohol dependency and heavy smoking in the NEET group there is currently no information on current incidence, and so costs associated with these problems are not estimated.

4.1.7 Crime

The main costs of young people and crime results from their involvement in property crimes. Much drug related crime among young people includes shoplifting, credit card fraud and other petty crime but these have low unit costs. A Home Office study, Brand and Price (2000) provides estimates of the costs of different offences. These costs include the estimated cost of the criminal justice costs along with the wider resource cost elements to families and firms for preventing crime and estimates of the violent and psycho-social costs of victims of crime. These figures are used in this study along with the estimates of crimes committed outlined in Section 3. Public finance costs related to the criminal justice expenditure, police, courts, prison, probation services etc. only.

The average unit costs for selected offences according to Brand and Price (2000) are in 1999 prices:

Resource costs: Residential burglary   £2,300; up-rated to 2000/01= £2376
                        Commercial burglary   £2,700; up-rated to 2000/01=£2790
                        Car theft   £890; up-rated to 2000/01=£920

Public finance costs: Residential burglary: £490; up-rated to 2000/01= £506
                        Commercial burglary: £490; up-rated to 2000/01=£506
                        Car theft: £30; up-rated to 2000/01=£31

4.1.8 Homelessness

A large number of voluntary organisations are involved in youth homelessness, particularly in sizeable cities. For example, organisations such as Centerpoint focuses entirely on youth homelessness, and other organisations such as the National Childrens' Homes, Youth 2000, and Foyers are heavily involved (see Quilgars, D. and Pleace, N., 1999). Unfortunately details of their unit costs are not readily available.

4.2 Medium-term costs over a working life

4.2.1 Underemployment

To estimate the medium-term unit costs of underemployment the difference in earnings for those with poor and average qualifications at different ages throughout the working life are required, as shown in Table 5.

Foregone earnings

Table 5 shows the earnings at different ages for those with no qualifications and for those with no passes above grade C at GCSE level.

Table 5:   Gross earnings by highest qualifications by age Spring 2000, £ per week, UK

	No qualifications	*< GCSE grade C*
16-24	100	180
25-34	220	260
35-44	200	280
45-54	210	260
55-59/64	210	290
All	200	260

Source: LFS

For comparison, average gross weekly earnings, given in Section 4.1.1 are considerably higher being £453.30 per week for men and £337.30 for women.

;

> We will assume that in general men and women are paid at average rates, these are £453.30 and £337.60 respectively. Those with low or no qualifications are paid £240 on average for both men and women. As women generally earn 20 per cent less than men, then we will assume that men earn £260 and women £220. The loss of earnings is therefore £453.3-260=193.3 for men and £337.6-220=117.6 for women. We will also assume conservatively that both men and women have a 30 year working life.

Tax foregone

The same information as set out in Section 4.1.1 and 4.1.2 is used to calculate the NI and tax foregone as follows:

National Insurance contributions:

Men:	employees' contributions =£19.33
	employers' contributions =£23.58
Women:	employees' contributions = £11.76
	employers' contributions = £14.35

Direct taxes:

We will assume a marginal tax rate of 11 per cent yielding £21.26 for men and £12.94 for women.

Indirect taxes:

For men   using the assumed 24 per cent indirect tax rate yields £(193.3-19.33-21.26)=36.65

For women using the same 24 per cent rate yields £(117.6-11.76-12.94)=22.30

4.2.2 Unemployment

Duration of unemployment

The NEET population have longer spells of unemployment in the current period than the non-NEET population. This cohort is likely to continue to have, over their working life, less time in work. However, all workers are on average likely to have some spells unemployed, see Table 6. The chance of being unemployed is linked to age for males, with longer spells of three years or more being more prevalent the older the man. However these figures are not available across all ages for NEET and non-NEET populations.

Table 6:   Duration of unemployment by age and gender Spring 2000, LFS

	20-29		*30-39*		*40-49*		*50-64*		*All*	
	M	F	M	F	M	F	M	F	M	F
<3m	37	53	26	41	29	36	24	34	33	44
3<6m	21	19	19	17	16	23	15	17	19	20
6m<1y	14	15	13	18	14	16	15	18	15	17
1<2y	14	7	15	12	15	12	16	-	14	10
2<3y	6	-	5	-	-	-	6	-	5	4
3+y	8	-	21	-	20	-	24	-	15	5

Source: Labour Force Survey

Analysis of the National Child Development Survey shows that a young person who experiences a year's unemployment between the ages of 16-23 will on average spend 23 per cent of their next ten years (that is up to age 33) unemployed. (SEU, 1999). From the estimates in Section 3 it was estimated that 25 per cent more of the ex-NEET cohort were unemployed compared to the non-NEET population at age 21. This information combined with that from the NCDS seems, therefore, the most useful information for estimating the excess number of years spent in unemployment over a working life for the NEET population. Over age 45, unemployment for the 25 per cent of the ex-NEET population with the interrupted work history is probably greater, say 30 per cent based on the patterns shown in Table 6. These assumptions are conservative suggesting that the impact of being NEET aged 16-18 on employment history is confined to the quarter of the cohort who are predicted to have had a longer spell of unemployment by age 21.

For the 25 per cent excess proportion of the ex-NEET population unemployed in the medium-term (Section 3, part 2.2) we will assume that 23 per cent of years 26-45 for this proportion of the NEET cohort are unemployed, that is 0.23 x 20=4.6 years; and 30 per cent of years 45-60 are unemployed, that is 0.30 x 15=4.5 years.

This totals to 10 years unemployment over a working life.

For the estimate of 10 years of unemployment for 25 per cent of the ex-NEET cohort the public finance and resource costs follow in a similar way as for the current cost calculations, shown in part 1 of this section. The figures related to the older age of the cohort when the costs incur.

Benefit payments:
i) JSA income-based rate for those over 25:

Single person	£52.20
Couple	£81.95
Dependent children	£30.95
Family premium	£14.25

ii) JSA contributions-based rate for those over 25: Single rate £52.20, no additions for dependants.

(Source: *Welfare Benefit Handbook, 2000/1*.)

According to DSS statistics the average weekly payments to 25-34 year olds is £59.58, to 35-49 year olds is £67.27, and to those aged 50 years and over is £62.33. Average payments to couples with dependents were £106.22 per week at February 1999 (DSS 2000/1).

> We will assume that average weekly JSA benefit payments to unemployed men aged 20-39 are £75 (assuming half have dependents), to men aged 40-49 (assuming most have dependents) are £90 and to men aged 50-64 (assuming few have dependents) are £70. We will assume that average weekly payments for women are £59.58 at all ages). These become £78, £94, £73, and £62 respectively in 2000/01 prices. The average over ages 20-64 is £81 per week.

iii) Housing Benefit: An average of 26,000 unemployed people aged between 35 and 59 with JSA receive Housing Benefit (HB). The average payment of HB is £48.95 to unemployed people of all ages in receipt of Income-based JSA, in August 1998 (DSS, 1999)

> We will assume that the average payment of £48.95 is paid to all unemployed people, which is £51 in 2000/01 prices.

Foregone earnings

As previously stated average gross weekly earnings for manual full-time employees of any age, at April 2000 for Great Britain from the *New Earnings Survey 2000* (National Statistics, 2000) are as follows:

Male manual:	£343.9
Non-manual:	£533.9
All:	£453.3
Female manual:	£227.9
Non-manual:	£357.5
All:	£337.6

> To provide a conservative estimate of unit costs, we will assume that unemployed men are paid at the manual rates above, and, because most women work in the service sector, that women are paid at the rates for all women. These are £343.9 for men and £337.6 for women respectively.

Tax foregone

National Insurance Contributions:

> Employees: 10 per cent of earnings between £67 and £535 per week.

> Employers: 12.2 per cent of earnings above £83 per week (WBH2000/1).

On the assumptions of earnings of £343.90 and £337.60 the contributions lost are:

For men:	employees' contribution:	£27.69
	employers' contribution:	£31.83
	Total:	£59.52
For women:	employees' contribution:	£27.06
	employers' contribution:	£31.06
	Total:	£58.12

Direct taxes

Using the figure of 11 per cent direct taxes on incomes between £10,000-14,999 is 11 per cent (National Statistics, 2001a) yields the following conservative estimates of lost direct taxes.

On the above earnings assumptions the weekly tax loss is 11 per cent of £343.90 and £337.60, which is £37.83 and £37.14.

Indirect taxes

Indirect taxes for 1998/99 accounted for 32 per cent of disposable income for households in lowest fifth of the equivalised household income distribution, and 24 per cent for next fifth (National Statistics, 2001a).

We will assume that each week the indirect taxes lost will be 24 per cent of £(343.90-37.83-27.69)=66.81 for men; and for women is 24 per cent of £ (337.60-37.14-27.06)=65.62

4.2.3 Teenage mothers

The main medium–term effect is interrupted employment. Young mothers may be returning to work as later mothers are leaving. Also it is difficult to determine the excess cost of early over later motherhood. We assume that the forgone earnings

are similar to those of other mothers but incurred earlier so that overall there are no additional excess costs in the medium-term.

Benefit payments: These are related to the additional costs of looking after children while in receipt of Income Support. Other mothers are not likely to be receiving income support while looking after their children.

i) Income Support. This is assumed to last for five years: Income Support (less personal allowance which is included in the costs of unemployment) will include two child dependent allowances and the lone parent family premium=£(69.10 for IS+58.95 for HB) per week.

ii) Working Families Tax Credit. This is assumed to last for 10 years: (£95.65 for WFTC+0.5x(£58.95) for HB) per week, assuming that they qualify for half of maximum housing benefit.

Some additional health and social care costs are likely to be incurred but there is no information on what these are. Plausible conservative assumptions of such excess costs are taken as follows:

Health

> Assume additional health inputs:
>
> Two extra visits to GP each year at a cost of £30 over a 10 year period= £300; ie £310 uprated to 2000/01).

Social services

> Assume continued involvement of a family support worker over a 10 year period at a cost of £100 per year (£103 uprated to 2000/01).

4.2.4 Poor health

Health care costs rise with age across the whole population. The relationship of poor health with unemployment, poverty, and other NEET risk factors suggest, however, the ex-NEET population will be over-represented in those with poor health in future years. The excess number with poor health is estimated to be a higher proportion in

the medium-term, being 3,533 men and 8,635 women, see Section 3, part 2.4. A similar sort of simulation of excess health care expenditure could be performed (dividing the previous estimates by 1.5, their average time period) as again there is no data to give reasonable estimates.

Using the previous examples (see Health costs in Current Cost section above) deflated to annual figures would yield an annual undiscounted cost of: £24.44; £171.11; £513.78 and £952.89 per year or £297,382 to £11,594,765 per year over a working life of 40 years or (£307,438 to £11,986,858 in 2000/01 prices).

The information to assess the impact of poor health over the working life as a result of being NEET at age 16-18 is not available, although there is likely to be some effect, which could, given these type of simulations, add significantly to resource and public finance costs.

4.2.5 Substance abuse

Of the 438 who are drug dependent it is likely that all will have at least one other treatment episode and therefore likely to incur costs of £1691 (2537/1.5) per year in 1995/96 prices over 10 years up to their early thirties.

The costs of premature deaths are significant, if the DETR figure of £1,047,240 per person is used, a total medium-term cost is estimated of £459 million, present value (£481m in 2000/01 prices).

As with poor health it would be expected that there would be additional alcohol dependency among the NEET group in future years but there is no evidence for such estimates.

There are more data on additional smoking rates and these consequences would be significant especially as the cohort reaches middle age. One in two smokers will die prematurely and the excess numbers of the NEET group who remain smokers into middle age could be significant as smoking is related both to low income and unemployment. Smokers will die at a later average age than accident victims but the costs are still substantial. Some of the annual £1.4 billion smoking related health care costs will be attributable to this group but offset by the higher health and care costs for those who survive into old age. However, there are no data to attribute resource and public finance costs of smoking or alcohol problems to the NEET cohort.

4.2.6 Crime

The overall average crime costs are set out in Brand and Price (2000) and these are the figures we will use in our estimates.

> *Resource costs:* approximately £2000 per additional offence, which becomes £2066 uprated to 2000/01.
>
> *Public finance costs*: £360 in criminal justice costs per additional offence which becomes £372 uprated to 2000/01.

4.3 Long-term costs

4.3.1 Costs of interrupted work histories

Individual costs

Differences in pension income resulting from interrupted work histories mean that those who were NEET at age 16-18 and are more likely to have experienced unemployment and lower wages through their working lives are likely to have lower pensions. Because pensioners are out of the labour market they are assumed to incur no resource costs but the difference in pensions is a cost to the individual and also has some implications in terms of tax foregone for public finance costs.

The difference in 1997/98 prices between the income of a single pensioner dependent on the state pension and other single retired people is £105 per week; and this difference for couples is £193 per week (National Statistics, 2001b).

> We will assume that the income foregone each week is this difference between the income of state pensioners and the income of other retired people. For single pensioners this is £110 (up-rated to 2000/01) and for couples is £202 (up-rated to 2000/01).

Public finance costs

Benefit payments: The average income from income-related benefits for recently retired couples is £33 per week and for all single pensioners is £38 per week in July 1996 prices (DSS, 1999).

> Up-rated to 2000/01 income related benefits are £37 per week for couples and £43 per week for single pensioners.

Tax loss: Because those who were NEET have lower pensions they also pay less tax, both direct and indirect (pensioners no longer have to pay contributions).

Direct:

> As before we assume an average tax rate of 11 per cent.

Indirect:

> As before, we assume 32 per cent of household disposable income.

Costs of continuing poor health

The poor health of ex-NEET people may in the long run lead to earlier deaths and less long-term use of health services. However, there are no data to estimate these effects.

Section 5:   Summary and discussion

The aim of this section is to pull together the information on the costs of being not in employment, education and training at ages 16 to 18. A summary of the total costs that have been estimated will be set out and discussed. It has not been possible to cost all the items listed in Section 2 and those not included will be highlighted. The methodology estimates the total costs of all young people who are NEET at 16-18, and as a result, does not identify the specific costs incurred by different groups such as young offenders, and drug abusers. As an alternative and to shed some light on the costs of such young people, hypothetical life courses have been created and the associated costs indicate how certain young people incur costs under many headings. These case studies are presented and discussed. Finally the main findings from this costing exercise are highlighted and the future potential for the development of the methodology outlined.

5.1   Summary costs

The summary of total resource costs and public finance costs are set out in Table 7. This is extracted from the spreadsheet included in Appendix 2. A discount rate of six per cent is used in estimating the present values in Table 7.

From Table 7 it can be seen that the medium-term costs dominate. This is mainly a result of the working life costs of underemployment and unemployment. The effect of low earnings over the working life is illustrated by the difference in the impact of educational underachievement in current costs and in medium-term costs. The current costs only cover the effect of three years at most of foregone earnings whereas the medium-term costs accumulate over a working life of 30 years in employment. For example, it is assumed that educational underachievers will spend 10 years unemployed over the working life.

Current health costs are relatively low compared with the costs of underemployment and unemployment. It proved difficult to establish a relationship between being NEET and additional poor health. On the whole 16-18 year olds have good health and make little demand on health services. The impact of NEET and related factors are more likely to have an effect on health later in life. All relevant health costs may not have been included so the table probably underestimates health costs, similarly with crime. Some people however incur very high health and crime costs. We have not been able to provide figures for the costs of criminal careers, for example. The methodology also spreads these costs over the wider groups of unemployed and

educational underachievers rather than accumulating them on smaller more specific groups of offenders, or substance abusers. It highlights, however, the costs of teenage motherhood among the current costs of NEET 16-18 year olds.

The total lifetime costs at present values (2000/01 prices) are £7 billion in resource costs and £8 billion in public finance costs. Estimates are conservative and only include a limited range of effects. The data for health and substance misuse costs were the most speculative. Excluding these costs has limited impact on public finance costs but lowers resource costs by some £0.5 billion. Most estimates were based on a single source of data and therefore there were no means of undertaking more structured sensitivity analysis across these figures. Rather the totals are presented, with the detailed calculations of how figures were calculated, in order for future researchers to improve and extend these estimates.

Table 7:   Summary of overall costs of being NEET at ages 16-18

	Resource costs, £m	Present value	Public finance costs, £m	Present value
CURRENT COSTS				
Educational underachievement				
Unemployed	51.06		33.91	
Inactive	21.50		13.77	
Unemployment	200.57		173.78	
Inactivity	300.18		260.09	
Teenage mothers	226.02		369.05	
Crime	32.30		5.55	
Sub total (current)	**831.63**	**831.63**	**856.15**	**856.15**
Poor health	0.11		0.11	
Substance abuse	3.80		3.80	
Sub total inc. health and abuse	*835.54*	*835.54*	*886.81*	*886.81*
MEDIUM-TERM COSTS				
Educational underachievement (over 40 years)	7429.15	2794.53	3863.07	1453.12
Unemployment (over 40 years)	7579.45	2851.07	5752.68	2163.91
Early motherhood (over 10 years)	56.12	41.30	4302.62[1]	3278.49
Crime (over ages 19-30)	39.56	29.12	7.12	5.2
Sub total (medium-term)	**15,104.28**	**5,716.02**	**13,925.49**	**6,900.72**
Poor health (total for 40 yrs)	12.30	4.63	12.30	4.63
Substance abuse (over 10 years)	0.02	0.01	0.02	0.01
Premature deaths		459		
Sub total inc health and abuse	*15,116.6*	*6,179.66*	*13,937.81*	*6,905.36*
LONG-TERM COSTS				
Pension differences			1521.52	352.73
Sub total (long-term)			**1521.52**	**352.73**
GRAND TOTAL		**6,547.65**		**8109.60**
Inc. Health & Abuse		*7015.20*		*8144.90*

[1] Based on 5 years on Income Support and 10 years on Working Families Tax Credit

The average per capita total present value costs over a lifetime are £45,000 resource costs and £52,000 public finance costs. The current per capita costs for NEET 16-18 year olds are £5,300 resource costs and £5,500 public finance costs. Thus if 10,000 (less than 10 per cent of the estimated population of 157,000 NEET population) people were removed from the group of NEET or socially excluded young people, total current savings would be £53m in resource costs and £55m in public finance costs. This assumes the 10,000 would be "average" and not have an over-representation of those NEET individuals with clusters of problems. If lifetime present value savings were considered, these would be £450m in resource costs and £520m in public finance costs.

Table 8:   Per capita costs

	Resource costs	Public finance costs
Present value lifetime costs	£45,000	£52,000
Current costs per NEET 16-18 year old	£5,300	£5,500

It should be noted that these costs relate to a snapshot picture of the current cohort of 16-18 year olds in the current economic climate with the current policy regime in place. A further exercise would be required to measure the effect of pro-active spending to reduce the numbers NEET or to re-integrate them later. Similarly, the effect of the economic cycle on the numbers NEET and the consequences for those who had been NEET is beyond the scope of this paper.

From Table 7 the costs of various combinations of impacts of being NEET at age 16-18 can be estimated. For example, what could be considered a minimum cost would include simply the effects of educational underachievement and unemployment, ignoring all other social costs, such as the additional health and unemployment costs of teenage motherhood, drug use and so forth. Table 9 sets out such minimal costs. As can be seen, ignoring the social costs reduces the overall costs of not being in education, employment or training at age 16-18 by £1 billion in terms of resource costs and £4 billion in terms of public finance costs. The costs of early motherhood seem to be the main reason for the difference in public finance costs if social costs are excluded.

Table 9:   Costs of educational underachievement and unemployment

	Resource costs, £M	Present value	Public finance costs, £M	Present value
CURRENT COSTS				
Educational underachievement		51.06		33.91
Unemployed[1]		200.57		173.78
MEDIUM-TERM COSTS*				
Educational underachievement	7429.15 (over 40 years	2794.53	3863.07 (over 40 years)	1453.12
Unemployment[1]	7579.45 (over 40 years	2851.07	5752.68 (over 40 years)	2163.91
LONG-TERM COSTS*				
Pension differences			1521.52	352.73
GRAND TOTAL		**5897.23**		**4177.45**

Note: 1 This excludes the additional current unemployment costs of teenage mothers. No additional costs were assumed in educational underachievement for teenage mothers.

As is clear from the above summary and its associated spreadsheet not all cost categories have incidence values and unit costs available or estimated. Table 7 lists the items for which information on incidence and unit costs was available and for which cost estimates could be calculated. Detailed listings are in the spreadsheet in Appendix 2. What has not been costed is set out in Table 10 below. It is based on the full list of costs outlined in Section 2 above. Overall individual and family costs have not been estimated, although foregone earnings could be considered as an individual cost.

Table 10:   List of resource and public finance costs not included

Current costs	
Educational underachievement	
Resource costs	Some wider macro-economic impact of poor skills base
Public finance costs	Remedial courses; payment of training allowances
Unemployment	
Resource costs	Doubt about additional health costs; voluntary sector inputs; breakdown of social cohesion
Public finance costs	Publicly funded schemes to reduce unemployment
Inactivity	
Public finance costs	Possible 'savings' from work of young carers
Poor health and disability	
Resource costs	Early death; employment impact
Public finance costs	Sheltered workshop and supported employment for disabled; revenue losses from employment impact and benefits paid.
Substance abuse	
Resource costs	Some omissions in drug-related crime, shop lifting, for example. Drug–related early deaths. Excess use of health and other services; victims of drug-related crime; passive smoking; high job turnover; property damage; lower productivity, impact of illegal economy; wider community effects of drug abuse. Impacts of smoking and alcohol abuse.
Public finance costs	Voluntary sector costs; Impacts of smoking and alcohol abuse
Crime	Some omissions in vandalism, assault and drug-related crime, shop lifting, for example.
Medium-term costs	
Underemployment	
Resource costs	Societal impact
Public finance costs	Remedial courses
Unemployment	
Resource costs	Social housing
Public finance costs	Money spent to reduce unemployment
Inactivity	
Resource costs	Inter-generational effects on health, education and employment
Public finance costs	Lifetime learning provision; voluntary sector inputs
Poor health	
Resource costs	Premature deaths, early retirement; employment impact
Public finance costs	Voluntary sector inputs; revenue losses from employment impact and benefits paid.
Crime	Criminal careers
Long-term costs	
Public finance	Payment for residential and nursing care

5.2 Case studies

An alternative method for following the associations between different aspects of social exclusion such as early motherhood, educational underachievement and unemployment is to consider individual lives or cases. In this section we will map out hypothetical life courses for four individuals: a man and woman who are NEET at age 16-18; and a man and women who are non-NEET.

The life courses for the NEET man and women are based on the cases 'Lisa' and 'Adam' outlined in the SEU (1999) report 'Bridging the Gap', and the non-NEET life courses are based on qualitative information from the ESRC study: 'Claire' and 'Stephen'.

The fourth and fifth columns in the table below set out the additional public finance costs of 'Lisa's' and 'Adam's' lives compared with those of Claire and Stephen. In addition to public finance costs there are individual, family and resource costs, but for simplicity we have only estimated the public finance costs. Even here some of the unit costs are not readily available without further research. The public finance costs of benefits paid, tax foregone, health service and criminal justice costs are taken from the unit cost section and are in 2000/01 prices.

In the main costing exercise we have had to separate rigorously the costs ascribed under the different cost headings. The case study exercise provides a useful check for showing how the different costs can combine within one person's life, so it could be considered valuable from that point of view. However, as both the life courses are hypothetical and the costs based on assumptions, the exercise can at best be considered illustrative or as a starting point for discussion.

However, the case studies illustrate very clearly how costs can accumulate over the life course for some individuals and groups of young people who are NEET at age 16-18.   The total additional undiscounted costs for 'Lisa' and 'Adam' amount to approximately £300,000. When discounted to present values (assuming a constant rate) this is approximately £84,000. This is considerably more than the per capita costs in Table 7. 'Lisa' has accumulated the long-term health costs of alcohol abuse, and some inter-generational costs in addition to the costs associated with teenage motherhood. 'Adam' has costs resulting particularly from crime, unemployment and redundancy.

Age ranges	NEET: Lisa	Non-NEET: Claire	Lisa's additional costs: Public finance only	
Pre 16	Lived with mother but in foster care for a period *Family*: Age 7 father died; poor relationship with mother and mother's boyfriend. *Health:* attempted suicide age 15. *Substance abuse*: smoking; alcohol *Criminal activities*: arrested for shoplifting and drinking alcohol – not charged. *Education:* School OK but missed some secondary school because foster home too far away. No qualifications.	*Family:* Lives with two parents *Health:* Good; some childhood illnesses, accidents *Substance abuse:* *Education:* Satisfactory	*Family:* Foster care *Health:* Hospital visits GP visits Social care *Crime:* Criminal Justice system	
Age 16-18	*Family:* mother married; improved relationship with mother and stepfather. Now living with boyfriend in large council flat. *Health:* period of depression age 16. *Teenage pregnancy:* yes. *Substance abuse:* alcohol addiction. *Crime:* no further mention. *Education/training:* Dropped out of hairdressing training because depressed. *Employment:* Casual work in a café for a year – poor pay but enjoyed the work Currently NEET:	*Family*: Still living at home *Health*: Good *Substance abuse:* Experimental drugs; social drinking; tried smoking. *Education:* Staying on in school. *Employment*: Saturday work in shop	**Health:** GP visits/prescriptions **Teenage pregnancy** *Substance abuse:* Alcohol addiction Smoking Educational underachievement: Drop out from course Unemployment: Unemployed 1 year	13@£19+16=455 £1086 A&E @ £67 No costs at this stage No data available JSA: 52x£37=1924 **Total: £2,446**
Age 19-25	*Family:* Continues living with boyfriend in council flat. *Health:* Improved; motherhood: Risk of postnatal depression. Second child at age 20. *Substance abuse*: Still drinking and smoking *Education/training:* no further courses.	*Family:* Lives at home; moves in with boyfriend at age 24. *Health:* Good. *Substance abuse*: Stopped smoking; social alcohol and soft drugs. *Education/training:* One year	*Health:* Health of children not good: excess visits to GP, accidents and hospital treatments. Substance abuse: Underemployment:	A& E= £67 21@ £19+16=735 No costs at this stage No costs at this stage

		vocational course after school *Employment:* Full time in retail	*Unemployment:* Benefits: Boyfriend in FT work Loss of tax revenues: Contributions: Direct Indirect	No benefits 7x52x£58=21,112 7x52x£37=13,468 Not clear – based on household income **Total: £35,382**
Age 26-35	*Family*: Split with boyfriend, single mother *Health:* Poor, depression.. *Children:* school, but education not valued *Substance abuse:* tendency to drink *Education/training:* no further courses. *Employment*: intermittent part-time work	*Family*: Marries boyfriend; starts family. Two children. *Health:* Good *Substance abuse:* None *Education*: No further. *Employment:* Leaves work to care for children	*Health:* GP visits for depression and alcohol *Substance abuse:* Drink and smoking Underemployment*: Low earnings* Unemployment: *Benefits: Income Support then New Deal and Working Family Tax Credit plus Housing Benefit* *Inter-gen.:* Children truanting; petty crime	26 @ £18+16= 884 None at this stage Benefits: 2 x 52 x £69+59=13,312 8 x 52 x£96+30=52,416 Tax foregone: 2 x 52 (58+37+66)=16,744 8 x 52 (26+13+22)=25,376 **Total: £ 108,758**

Age 36-45	*Family:* Mostly on her own *Health:* Stressed. *Children:* Teenagers; *Substance abuse:* Some heavy drinking *Employment:* Some full-time work	*Family*: Married *Health*: Good *Employment:* Starts part-time work	*Health*: GP visits *Substance abuse*: drink and tobacco. Underemployment: *9 yrs* Unemployment: *1 yr JSA* *Inter-gen:* Daughter pregnant	26 @ £19+16=884 9 x 52 x (26+13+22)=28,548 1 x 52 x (58+37+66)=8,372 1 x 52 x (62+51)=5,876 **Total: £43,706**
Age 46-60	*Family:* New partner *Health:* Improved *Children:* Left home *Substance abuse:* Less drink *Employment*: Full time work	*Family:* Married *Health:* Good *Employment:* Full time	*Health*: No extra costs *Substance abuse:* Smoking – lungs/heart affected *Underemployment:*	Hosp= 3@ 230=690 12 @ £19+16=420 15 x 52 x (26+13+22)=47,580 **Total: £ 48,690**
Age 61-75	*Family:* Alone *Health:* Some chronic conditions *Substance abuse:* None	*Family*: Married *Health:* Good	On income support	15 x 52 x 38=29,640 15 x 52 x (0.11+0.32) x110 =36,894 **Total: £ 66,534**
Age 76 and over	*Family*: Alone *Health:* Poor: dies at 77	*Family:* Widowed *Health:* Some chronic conditions	On income support for 2 years	2 x 52 x 38= 3952 2 x 52 x (0.11+0.32) x110 =4919 **Total: £8,871** **GRAND TOTAL £314,387**

Age ranges	NEET: Adam	Non-NEET: Stephen	Adam's additional costs: Public Finance only	
Pre 16	*Family:* Mother, stepfather and siblings; left home age 14 because of stepfather; in care; homeless; left care at 16; racial abuse. *Health:* Good *Substance abuse:* Started smoking cannabis and drinking alcohol *Criminal activities*: Arrested for shoplifting *Education:* Expelled from primary and secondary school for fighting; In top classes; Youth Awards Scheme *Employment:* Intermittent casual work	*Family:* Lives with two parents *Health:* Good; some childhood illnesses, accidents *Substance abuse:* None. *Crime*: None *Education:* Satisfactory; 5 GCSEs	Costs of local authority care Criminal justice system	
Age 16-18	*Family:* Living arrangements chaotic but now in a flat via a hostel – been there 2 months *Health:* Good *Teenage father:* Girlfriend has baby *Substance abuse*: Continued smoking cannabis and further experimental drug use. *Crime:* Cautioned for evading taxi fare; delayed charge for armed robbery *Education/training:* NEET *Employment:* NEET	*Family:* Still living at home *Health:* Good *Substance abuse:* Experimental drugs; social drinking; tried smoking. *Education:* Staying on in school.	Criminal justice system Underemployment: 2 yr Unemployment: 1 yr Child Support Agency 2 yr Cost of place in voluntary hostel:	1@ 2376 1 @ 920 Total=3296 2 x52x (9+4+10)=2392 1 x52 x (28+22+53)=5356 JSA: 1 x52 x 108=5616 Unit cost not known Unit cost not known **Total: £16,660**

Age				

Age 19-25	*Family:* Moved in with girlfriend; another baby.
	Health: Good
	Substance abuse: Continued smoking and drinking.
	Crime: Still involved in petty crime; spell in prison.
	Education/training: On training scheme for a while
	Employment: Difficulty finding work, Spells of unemployment. Takes training option on New Deal and finally finds work
		Family: Lives at home.
		Health: Good.
		Substance abuse: Social alcohol and soft drugs.
		Education/training: Two year vocational course after school; Some in work training.
		Employment: Starts work at 20 Full time
			Criminal justice system
			Cost of place on course
			Underemployment: 4 yrs
			
			Unemployment: 3 yrs
			
			Child Support Agency
				2 @ 2066=4132
				Unit cost not known
				4 x 52 x (46+21+37)= 21,632
				
				3 x52 x (60+38+67)
				  =25,740
				3 x 52 x (81+51)
				  =20,592
				Unit cost not known
				
				Total: £ 72,096

Age 26-35	*Family:* Alone for a while than moves in with another woman;
	Health: Good
	Children: 2 with first partner now teenagers; 2 with second.
	Substance abuse: Less.
	Crime: no further episodes
	Education/training: No further
	Employment: intermittent.
		Family: Moves in with girlfriend at age 28. Marries: two children.
		Health: Good
		Substance abuse: None
		Education/training: Further in work training.
		Employment: Continues in same job; some promotion.
			Underemployment:
			
			Unemployment:
			
			Child Support Agency
				8 x 52 x (46+21+37)=43,264
				2 x52 x (60+38+67)
				  =17,160
				2 x 52 x (81+51)
				  =13,728
				Unit cost not known
				
				Total: £74,152

Age 36-45	*Family*: Living with partner *Health:* Good *Children:* At school. *Substance abuse:* None *Crime:* None *Employment*: Full time work	*Family:* wife and two children *Health:* Good *Employment:* Changes job for promotion and additional money	No additional costs	

Age 46-60	Family: Living with partner
	Children: Teenagers, leaving home
	Health: Less good
	Employment: Redundant at 55
		Family: Wife and two children now teenagers.
		Health: Good
		Employment: Further promotion; and higher salary.
			Underemployment: 13 yrs
			
			Unemployment: 2 yrs
			
			Health: additional GP visits; hospital stay
				13x52x (46+21+37) =70,304
				
				2x 52 x (60+38+67)
				    =17,160
				2 x 52 x (81+51)
				    =13,728
				3 @ 230=690
				6@ (19+16)=21
				
				Total: £ 102,092

Age 61-75	Family: Lives with partner
	Health: Poor;
	Employment: None
		Family: Wife, children grown up and left home.
		Health: Good until 74
		Employment: Retired at 62.
			Underemployment: 2 yrs
			
			Unemployment: 4 yrs
			
			Health: additional GP visits; hospital stay
				2x52x (46+21+37)
				    =10,816
				2x 52 x (60+38+67)
				    =17,160
				2 x 52 x (81+51)
				    =13,728
				3 @ 230=690
				6@ (19+16)=210
				
				Total: £42,604

Age 76 and over				**GRAND TOTAL:** **£307,604**

5.3   Final comments

This exercise to estimate the costs of social exclusion, being NEET at ages 16-18, has revealed the high cost over the working life of the increased likelihood of unemployment and underemployment both in the overall cost exercise and in the case study approach. The costs of teenage motherhood are also highlighted in both methodologies. The accumulation of costs for particular groups of young people are emphasised in the case studies.

One major problem in carrying out this exercise is estimating what happens after age 30. Most of the estimated probabilities (for employment, for example) even at this age are based on cohort studies that were carried out in a very different economic and policy context to that in which the current 16-18 year olds will live their lives. Further work could model future outcomes for current cohorts. One potential future development would be to attempt to construct simulation models of different life stage consequences. These would simulate, for example, the employment consequences of, say, different lengths of time unemployed at age 16-18 with different levels of qualifications and degrees of substance abuse. This sort of exercise could provide information on what factors or combinations of factors make significant differences to costs. The use of a 'tax-benefit' model to estimate actual benefits received and taxes paid would improve on the average calculation used here. Refinement of the costs for poor health, crime, and substance abuse would require data to be gathered specifically for different ages.

A further exercise could cost more directly the policy inputs to help young people at this stage. One methodology on costing could be to list the initiatives being taken by different departments and agencies, including projects associated with them being run in the voluntary sector and to use the budgets allocated to these drawn from whatever source, or solely from government subsidy or local government grant, to estimate cost. The initiatives that could influence the numbers who are NEET are, however, numerous, cross Departments and are aimed at different sub-groups and ages.   For example, some of the aims of 'Quality Protects' and the new arrangements for leaving care, are to maximise the educational potential of those 'looked after' and to avoid later social exclusion. Also, several initiatives sponsored by the Home Office (*On Track*, for instance) are targeted at young people who may be at risk of drifting into criminal behaviour, but who are also likely to be disaffected from education and eventually end up out of education, employment and training aged 16-18. One of the aims of the *Sure Start* programme is to prevent the later social exclusion of children.   This is investing early in the life course to prevent

NEET (amongst other negative, and expensive, outcomes). The Children's Fund, is investing a significant amount of public money (£70m) in programmes for 0-19 year olds to prevent social exclusion. Outside of Government, the voluntary sector also has hundreds if not thousands of projects. For example, the *Communities that Care* programmes being supported by the Joseph Rowntree Foundation with £1 million of 'seed-corn' money, have similar aims. However, these funds, which are substantial, have not been included in our estimates of the total costs of social exclusion among young people. Ideally future costing studies can link both the costs and outcomes of such policies with changes in the future costs related to changing numbers who are NEET aged 16-18.

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Appendix 1: Estimates of the numbers of socially excluded 16-18 year olds

The research brief for this project required an estimation of the costs of being NEET for those aged 16,17 and 18. Most surveys, particularly published information from surveys, consider age chronologically, but the DfES indicated that for this project it was interested in the three years after the end of compulsory education. Compulsory education finishes at age 16 but few young people leave school on their 16th birthday. Some will stay until the end of the term in which they are 16; the majority of 16-year-old leavers will stay in school until the end of the school year in which they are 16. If they leave before the end of the school year they are unlikely to take the June exams and are likely to have few qualifications. Those who leave after the end of the school year in which they are sixteen, if they are staying on at school or going on to further or higher education in September can be considered to still be in education although they may take a summer job. Most cross-sectional studies ask respondents what they were doing last week, and if they had a job that is the employment status which would be recorded. It often requires detailed analysis to tease out whether education or employment is the main activity. Even during term time many young people have part-time jobs. Payne (1999), using the Youth Cohort Study to investigate the circumstance of young people NEET took as the starting point of her investigation, the employment status in the September after the end of the school year in which the cohort was 16. Because of the design of this survey, the results presented cover 22 months from September 1995 to June 1997.   In September 1995 most of the cohort would be 16 and some would have turned 17, in September 1996 most would be 17 but some would have turned 18, and in June 1997 most would have become 18. The group would consist of an incomplete age group of 16 year olds, all 17 year olds and an incomplete group of 18 year olds.   Clearly there are not three complete chronological years: 16 year olds, 17 year olds and 18 year olds.

This research was specifically concerned with those not in education, employment or training (NEET). The Youth Cohort Analyses used in the SEU report defined NEET as months spent either unemployed or 'doing something else' (SEU, 2000; Payne, 2000). Young people with part time jobs were not included in the NEET group. In the analyses it became clear that 'doing something else' included people who were on holiday for most of the month, so that the summer vacations were often recorded as 'doing something else'. Payne felt it was inappropriate to include this group as NEET particularly if they were in education before and afterwards.

In Statistical Bulletin Number 02/2000 (DfES, 2000) two definitions are presented:

1. The first which is based on data from school, college and trainee records and the Labour Force Survey, defines young people as NEET if they are not in full-time education, nor Government sponsored training, nor employed with training, nor employed without training. People NEET therefore include unemployed people, those looking after a family which includes informal care of adults as well as children, disabled people, people in part-time education (but not those in part-time work) and others not active in the labour market.

2. A similar definition was used with the YCS, but in this case participation estimates excluded special schools, and people were allocated according to their main activity.

The comparison between the two estimates of NEET in Table 1 of the Statistical Bulletin 02/2000 show the greatest discrepancy for young men and young women aged 18. The LFS/administrative records estimates 39.3 per cent young men as being not in education or training (although in employment) compared with 32.2 per cent using the YCS cohort 8 sweep 2 at the end of 1997. The corresponding percentages for women are 41.3 from the LFS and 32.0 from the YCS. Table 10 from LFS/administrative records in this paper estimated that from a total of 1,839,000 16-18 year olds, eight per cent of 16-17 year olds were NEET and 12 per cent of 18 year olds were NEET. Thus 96,000 16-17 year olds and 77,000 18 year olds were NEET yielding a total of 173,000. Of these 45 per cent were men, 77,700; and 55 per cent were women, 95,150. Also, 56 per cent of the NEET group were aged 16-17.

The DfES uses LFS/administrative records, but not the YCS, to estimate the number of 16-18 year olds who are NEET. At the end of 1999 the DfEE estimates of the number of 16-18 year olds NEET in England was 157,000 (eight and a half per cent) a decline from ten per cent, 185,000 at the end of 1998 (DfEE: Participation in education, training and employment by 16-18 year olds in England: 1998 and 1999, SFR 28/2000).

A note on estimates from other sources of the numbers of socially excluded 16-18 year olds
Each author writing about social exclusion among young adults uses a different definition. The age of interest is different; the definition of social exclusion is different. The data sets and information on which the estimates are based are

different. The Demos report (Bentley and Gurumurthy, 1999) uses the Labour Force Survey to discuss socially excluded young people. It talks about 16 and 17 years olds who are 'off-register'. This excludes the long-term sick and disabled, but includes those not in paid work and not claiming unemployment related benefits, and those not in full-time education. In many of the analyses it groups 16-24 year olds together. The ONS publication 'Social Focus on Young People' (2000) only has information on 16-24 year olds not in education employment or training based on the Labour Force Survey.

Bivand, (*Working Brief*, November 2000, p.12) using the Labour Force Survey estimates that there are 136,000 16 and 17 year olds NEET (9.5 per cent of the population) for the period autumn 1999 to summer 2000 – a period of ten months. This compares with the DfEE estimate of 97,000 16 and 17 year olds at the end of 1998, and of 91,000 in 1999. He claims that using the administrative records from post-16 educational institutions can result in double counting as there is no unique individual identifier which would say whether a young person was enrolled both in school and a college course or on a work-based training course and a college course.

Using the Labour Force Survey also has the problems of survey non-response. Households consisting of one person aged 16-19, living in shared accommodation were underrepresented in the LFS as were those with no post-school qualifications. All of these groups are strongly associated with being NEET. The method of weighting to the population estimates does not overcome this bias. For young people living with their parents who can give proxy responses, parents may be less likely to admit or know that the young person is NEET. Bivand thus suggests therefore that his figures are also likely to under-represent the true numbers of NEET young people. He also comments on a further number who will only be very loosely attached to the labour market, for example in very part-time work.

Some work undertaken on the Family Resources Survey for a current ESRC project estimates the proportion of NEET 16-18 year olds in England (chronological age groups) as 9.9 per cent in 1997/98 (Hutton, 2000). The FRS is a large household survey interviewing 30,000 households and over-sampling lower income groups. There were 1,827 16-18 year olds interviewed in 1997/98. The categories used to define the group were young people who were unemployed (6.9 per cent), looking after a family (1.5 per cent) and sick or disabled (1.5 per cent). If people whose main occupation is part-time work (3.6 per cent) are included, the percentage defined as NEET rises to 13.5 per cent. Those with only part-time work are only marginally

attached to the labour market. However, for consistency with other work, and because those with part-time work do have regular contact with employment and thus cannot easily be defined as completely excluded for any further analysis of the characteristics of the NEET population, the first definition is used in some background analyses of the characteristics of the NEET population.

A recent paper by Bynner (2000) addresses the issue of whether those who work part-time only should be included within the NEET definition, and also concludes that the definition of NEET should exclude those in part-time work. From analysis of the BCS70, the group of 16-18 year olds NEET not including part-time workers are more different from the non-NEET population than when those working part-time are included. His estimate, based on being NEET for six months or more over the 24 months from January 1987 (the January after the end of compulsory education in July 1986) to January 1989 is that 11 per cent of the cohort were NEET, seven per cent men and 14 per cent women.

Appendix 2:   Spreadsheet of estimation of costs

In the spreadsheet, the first column labels the cost heads. The third column gives the unit costs for earnings, benefits and taxes forgone on a weekly basis, for example the foregone earnings for 16-17 year olds is £40 per week. Other unit costs vary according to the period specified, for example under teenage mothers, the health costs for mother and child are £1050 for the whole period 16-18. Thus the figures in the second column, the incidence values are generally a product of the number of people involved and the period of involvement in weeks, for example the incidence value for the resource cost of foregone earnings for unemployed educational underachievers aged 16-17 is 0.55x18840 (to give numbers of 16-17 year olds) x 21 x 4 (assuming unemployed 16-17 year olds underachievers are in work for 21 months until age 18).

ESTIMATING TOTAL COSTS

Cost heads	Numbers	Unit costs	Total costs	Res tots £M	sub-Pub tots £M	Fin sub tots
Current 16-18 NEET						
Educational underachievement	31400					
Unemployed	18840					
Inactive	12560					
Unemployed						
Resource costs, foregone earnings Weeks						
16-17: for 21m	886233.6	40	35,449,344			
18 Men: for 9m	134291.52	60	8,057,491			
18 women: for 9m	167864.4	45	7,553,898	51.06		
Public finance costs						
Lost contributions						
16-17 year olds	886233.6	8.88	7,869,754			
18 men	134291.52	13.32	1,788,763			
18 women	167864.4	9.99	1,676,965			
Tax foregone						
Direct						
16-17 year olds	886233.6	4.4	3,899,428			
18 men	134291.52	6.6	886,324			
18 women	167864.4	4.95	830,929			
Indirect						
16-17 year olds	886233.6	10.11	8,959,822			
18 men	134291.52	15.17	2,037,202			
18 women	167864.4	35.55	5,967,579		33.91	
Inactive						
Resource costs, foregone earnings						
16-17: for 15m	422016	40	16,880,640			
18 Men: for 4m	39790.08	60	2,387,405			
18 women: for 4m	49737.6	45	2,238,192	21.5		
Public finance costs						
Lost contributions						
16-17 year olds	422016	8.88	3,747,502			
18 men	39790.08	13.32	530,004			
18 women	49737.6	9.99	496,879			
Tax foregone						
Direct						
16-17 year olds	422016	4.4	1,856,870			
18 men	39790.08	6.6	262,615			
18 women	49737.6	4.95	246,201			
Indirect						
16-17 year olds	422016	10.11	4,266,582			
18 men	39790.08	15.17	603,616			
18 women	49737.6	35.55	1,768,172		13.77	

Unemployment	94,200				
	Weeks				
Resource costs, foregone earnings					
16-17 year olds, wks, (3 mths)	685776	140	96,008,640		
18 year old men wks, (3 mths)	242470.8	200	48,494,160		
18 year old women, wks (3mths)	303088.5	185	56,071,373	200.57	
Public finance costs, benefits					
16-17 year olds	685776	36.92	25,318,850		
18 year olds	538,824	96.26	51,867,198		
Contribution loss					
16-17	685776	14.25	9,772,308		
18 men	242470.8	27.57	6,684,920		
18 women	303088.5	24.24	7,346,865		
Tax foregone					
Direct					
16-17 year olds	685776	9.8	6,720,605		
18 men	242470.8	22	5,334,358		
18 women	303088.5	20.35	6,167,851		
Indirect					
16-17	685776	39.33	26,971,570		
18 men	242470.8	52.7	12,778,211		
18 women	303088.5	48.91	14,824,059		173.78
Inactivity	62,800				
Excluding teenage mothers	18,134				
Excluding unable to work	9,420				
Other inactive	35,246				
Resource costs, foregone earnings					
16-17 year olds, wks, (1 yr)	1026363.52	140	143,690,893		
18 year old men, wks (1 yr)	362892.816	200	72,578,563		
18 year old women, wks, (1 yr)	453616.02	185	83,918,964	300.18	
Public finance costs, benefits					
16-17 year olds	1026363.52	36.92	37,893,341		
18 year olds	806,428	96.26	77,626,805		
Contribution loss					
16-17	1026363.52	14.25	14,625,680		
18 men	362892.816	27.57	10,004,955		
18 women	453616.02	24.24	10,995,652		
Tax foregone					
Direct					
16-17 year olds	1026363.52	9.8	10,058,362		
18 men	362892.816	22	7,983,642		
18 women	453616.02	20.35	9,231,086		
Indirect					
16-17	1026363.52	39.33	40,366,877		

18 men	362892.816	52.7	19,124,451		
18 women	453616.02	48.91	22,186,360		260.09

Teenage mothers, out of work 1.5 yr 18,134
Individual
Families
Resource, foregone earnings, wks

16-17 year olds, wks, (1.5 yr)	792093.12	140	110,893,037		
18 year old, wks, (1.5 yr)	622358.88	185	115,136,393	226.02	

Public finance costs, benefits

      Contribution loss

16-17 year olds	792093.12	14.25	11,287,327		
18 year old	622358.88	24.24	15,085,979		

    Tax foregone

  Direct

16-17 year olds	792093.12	9.8	7,762,513		
18 year old women	622358.88	20.35	12,665,003		

    Indirect

16-17 year olds	792093.12	39.33	31,153,022		
18 year olds	622358.88	48.91	30,439,573		

Benefits

16-17 year old plus child	792093.12	153.74	121,776,396		
18 year olds plus child	622358.88	186.73	116,213,074		
Health costs/mother/child	18,134	1050	19,040,700		
Social services costs/ mother/child	18,134	200	3,626,800		369.05

Crime
Individual
Families
Resource

Residential burglary	5524	2300	12,705,200		
Commercial burglary	5493	2700	14,831,100		
Car theft	5363	890	4,773,070		

Public finance

Residential burglary	5524	490	2,706,760		
Commercial burglary	5493	490	2,691,570		
Car theft	5363	30	160,890	32.3	5.55

Sub-total current costs				**831.63**	**856.15**

Poor health

Lowest estimate				0.11	0.11
Highest estimate				4.64	4.64

Substance abuse				3.80	3.80

Sub-total inc. health and abuse

Low					835.54	886.81	
High					840.07	887.65	

MEDIUM-TERM COSTS

Cost heads	Numbers	Unit costs	Total costs	Res tots	subPub tots	Fin sub tots
Educational underachievement	31,400					
Resource cost, foregone earnings						
Men: over 30 years, wks	22042800	193.3	4,260,873,240			
Women: over 30 years, wks	26941200	117.6	3,168,285,120	7429.15		
Public finance costs						
Contributions lost						
Men: over 30 years	22042800	42.91	945,856,548			
Women: over 30 years	26941200	26.11	703,434,732			
Direct tax foregone						
Men: over 30 years	22042800	21.26	468,629,928			
Women: over 30 years	26941200	12.49	336,495,588			
Indirect tax foregone						
Men: over 30 years	22042800	36.65	807,868,620			
Women: over 30 years	26941200	22.3	600,788,760		3863.07	
Unemployment	39250					
Resource cost, foregone earnings						
Men: over 10 years, wks	9184500	343.9	3,158,549,550			
Women: over 10 years, wks	11225500	337.6	3,789,728,800	7579.45		
Public finance costs						
Benefits						
Men, JSA+HB, over 10yrs, wks	9184500	129.95	1,193,525,775			
Women, JSA+HB, over 10yrs, wks	11225500	110.95	1,245,469,225			
Contributions lost						
Men: over 10 years	9184500	59.52	546,661,440			
Women: over 10 years	11225500	58.12	652,426,060			
Direct tax foregone						
Men: over 10 years	9184500	37.83	347,449,635			
Women: over 10 years	11225500	37.14	416,915,070			
Indirect tax foregone						
Men: over 10 years	9184500	66.81	613,616,445			
Women: over 10 years	11225500	65.62	736,617,310		5752.68	
Inactivity, early motherhood	43,175					
Public finance costs						
Benefit costs: IS+HB +CB for 5 yr	11225500	128.05	1,437,425,275			
WFTC+HB for 10 years	22451000	125.12	2,809,069,120			
Health costs	43,175	300	12,952,500			
Social services costs	43,175	1000	43,175,000	56.12	4302.62	

Crime

				Rees tots	Fin sub tots
Resource cost	19,782	2000	39,564,000	39.56	
Public finance costs: annual	19,782	360	7121520		7.12
Sub-Total Medium				**15104.28**	**13925.49**

Poor Health

	Rees tots	Fin sub tots
Lowest estimate	12.3	12.3
Highest estimate	479.47	479.47
Substance abuse	0.02	0.02

Sub-total inc. health and abuse

	Rees tots	Fin sub tots
Low	15,116.6	13,937.81
High	15,538.77	14,404.98

LONG-TERM COSTS

Cost heads	Numbers	Unit costs	Total costs	Rees tots	subPub tots	Fin sub tots
Lower pensions but no IS						
Resource cost						
Difference in pension levels						
Couples to 75, 10 yrs	8164000	202	1,649,128,000			
Single post 75, 7 yrs	5714800	110	628,628,000			
Public finance cost						
Tax foregone						
Direct:						
Couples to 75	8164000	22.22	181,404,080			
Single post 75	5714800	12.1	69,149,080			
Indirect						
Couples to 75	8164000	64.64	527,720,960			
Single post 75	5714800	35.2	201,160,960			
On income-related benefits						
Benefits paid						
Couples to 75	8164000	37	302,068,000			
Single post 75	5714800	42	240,021,600		1521.52	