

Indicators of Sustainable Development for Scotland

February 2003
Paper 2003/3

Scottish Executive Environment Group

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INDICATORS OF SUSTAINABLE DEVELOPMENT FOR SCOTLAND

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FOREWORD



The fundamental aim of sustainable development is to secure the future. We have seen how the actions of the past have made life more difficult for us today. Developing sustainably means ensuring that our actions today do not limit our quality of life in the future. Our vision for the future of Scotland is based on three principles:

- that we should have regard for others who do not have access to the same level of resources and the wealth they generate;
- that we should minimise the impact of our actions on future generations by radically reducing our use of resources and minimising environmental impacts;
- and, most crucially of all, that we should live within the capacity of the planet to sustain our activities and to replenish the resources that we use.

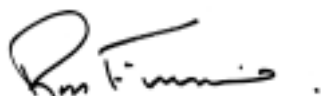
These principles are vital but they must lead to action. Without priority areas and measurable targets, it is difficult to progress sustainable development in a practical, down to earth fashion.

In April 2002 we published “*Meeting the Needs...*”, a report in which we set our vision for a sustainable Scotland and the key Scottish priorities for sustainable development: resource use, travel and waste. It also included 24 indicators across these priorities and social justice, against which we will measure our progress on sustainable development in Scotland.

In paragraph 43 of *Meeting the Needs...* we promised to publish full data on each indicator later in the year. This report represents the fulfilment of that commitment. It contains detailed information on trends over time, statistical information, analyses of the information by urban and rural areas and highlights the action we are taking for all 24 indicators.

We have chosen these indicators as a starting point. As we continue with our commitment to sustainable development, so we will continue to refine the indicators that allow us to measure progress. They will be improved and we will add to and develop our range of targets.

Making sustainable development a reality in Scotland will not be simple to achieve. But the indicators in this report link directly to policies and programmes within the Executive and provide the measure of how our efforts are contributing to the goal of sustainability.

A handwritten signature in black ink, appearing to read 'Ross Finnie'.

ROSS FINNIE, MSP

Minister for Environment and Rural Development

INTRODUCTION

The Scottish Executive is committed to sustainable development – it has been a central element of our Programmes for Government and its key role was reaffirmed in Parliament on 9 January 2002.

In order to ensure that our programmes are implemented sustainably we need to be able to measure our progress in the longer term. Delivering our range of programmes involves a huge range of actors and we must have a clear set of indicators to guide us towards sustainability. If each of our programmes is measured against these indicators then we can be confident that we are moving towards our goal across the Executive as a whole.

In May 2001 we launched our consultation, *Checking for Change*, asking for views on ways in which we could best measure progress towards sustainable development using indicators. We received many valuable contributions which led us to conclude that our indicators must be able to:

- reflect Scottish circumstances and, in particular, the distinctive Scottish priorities of resource use, energy and travel.
- be able to be compared with other indicator systems as used in other parts of the United Kingdom, Europe and at world level. For example, our matrix of indicators can be compared to the UK headline indicators.
- be applied practically at a local level.

Consequently, in April 2002 we published *Meeting the Needs...Priorities, Actions and Targets for Sustainable Development in Scotland*, which sets out our approach to sustainable development. It sets out our vision for a sustainable Scotland and identifies resource use, energy and travel as the three key Scottish priorities. Our vision is wider than this, however. Sustainable development is also about social and environmental justice. And we have clearly set out programmes on health, education, crime and transport which are central to our sustainable development approach. In addition, *Meeting the Needs...* lists the 24 indicators that we have adopted to enable us to measure our progress towards sustainability.

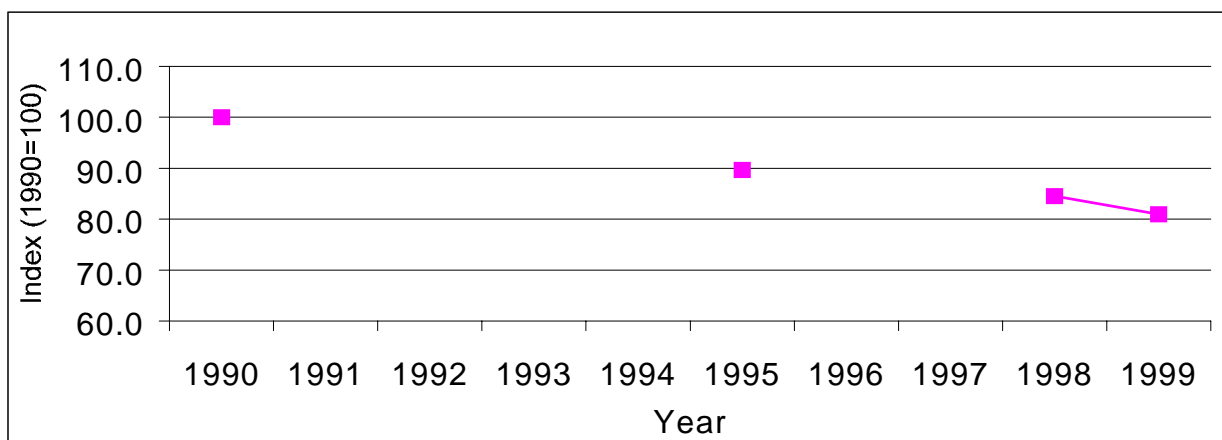
This report describes the indicators in detail. For each indicator we have provided information about where we are now, based upon the latest figures available at the time of publication. We have given a description of the relevance of the indicator, identified trends, looked where possible at the differences between urban and rural areas in Scotland and given a brief summary of the main actions we are taking to achieve our targets.

For some indicators we have already set targets and for others new targets have been set since *Meeting the Needs...* was published. For some we intend to set targets in light of further policy and scientific work but for others it is more appropriate to monitor the trend than set a target. This is a developing process and we will review the usefulness of the indicators in 2003. We will regularly report on their status and add to them if and when additional measures are necessary.

We are confident that the initial indicator set described in this report provides a framework which allows us to focus our action on the concerns of today while considering the needs of tomorrow.

Indicator 1. Sustainable prosperity

Index of carbon dioxide emissions divided by GDP (1990=100)



Year	1990	1995	1998	1999
Index of carbon dioxide emissions divided by GDP	100.0	89.7	84.6	81.0

Source: Scottish Executive and NETCEN

Notes: Scottish carbon dioxide emissions were first published in 2000 for 1990 and 1995. Scottish emissions data for 1998 and subsequent years are being published annually. The 1999 figure published in *Meeting the Needs...* was 80. The difference is due to a revision of GDP.

The relevance of the indicator

Delivering a sustainable economy means decoupling growth from environmental pressure. In this way we can enhance prosperity while reducing our impact on the environment. In particular we are seeking to reduce the carbon intensity of the Scottish economy.

Detailed definition and source details

This indicator uses data from two sources. The quarterly *Gross Domestic Product for Scotland*¹ series published by the Scottish Executive is a weighted aggregation of over 250 indices measuring output across the economy. It is produced using a mixture of ONS survey data and other data sources. Carbon dioxide emissions for 1990, 1995, 1998 and 1999 were taken from the report compiled by NETCEN for the Department for Environment, Food and Rural Affairs (Defra) and the devolved administrations².

Trends

The index of carbon intensity of the economy has fallen from 100 in 1990 to 81 in 1999, as a result of increasing Gross Domestic Product (GDP) and a reduction of emissions of carbon dioxide into the atmosphere (see Indicator 7 for information on carbon dioxide emissions).

¹ Available on the Scottish Executive website at: www.scotland.gov.uk

² Salway, A.G., Murrels, T. P., Pye, S., Watterson, J. & Milne, R. (2001) "Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990-1999". NETCEN, AEATechnology, AEAT/R/ENV/0772. Available at: www.aeat.co.uk/netcen/airqual/reports/ghg/regghg99_issue_1.pdf

Further disaggregation

No further disaggregation is possible.

Target

No target - the absolute value has no significance, but a reducing trend is desirable.

Action

The *Framework for Economic Development in Scotland*³ sets out our vision to raise the quality of life of the Scottish people through increasing economic opportunity for all on a socially and environmentally sustainable basis. The role of our Enterprise Networks is to be key partners in delivering our vision. *A Smart Successful Scotland: Ambitions for the Enterprise Networks*³ sets out our strategy for economic development in the long term. It recognises that while the economy needs to develop so too must we be aware of achieving a sustainable Scotland.

In line with this, Scottish Enterprise has formed a policy group on sustainable development which has developed a programme of specific actions to embed sustainable development principles into its business activities. As these principles are embedded Scottish Enterprise intends that this will have a knock-on effect on the businesses it supports and advises. The nature of the rural economy has meant that sustainable development has a more established place in Highlands and Islands Enterprise activities and is an important part of not only of the network's business development activities but also its specific 'strengthening communities' remit. Highlands and Islands Enterprise is currently working to produce a document which will define their approach to sustainable development and outline a programme of actions.

We published the *Scottish Climate Change Programme*⁴ in November 2000 which sets out the measures that will deliver Scotland's contribution to the UK Climate Change Programme, aimed at meeting the UK Kyoto commitment and moving the UK as a whole toward the domestic goal of a 20% reduction in carbon dioxide emissions.

We provide funding through the Scottish Energy Efficiency Office⁵ (SEEO) for the Carbon Trust's⁶ activities in Scotland. The Carbon Trust runs programmes aimed at encouraging reductions in business energy consumption and fostering research into low carbon technology. The Carbon Trust's **Low Carbon Innovation Programme** (LCIP) is aimed at assisting the commercialisation of innovative low carbon technologies. This will contribute to reducing the carbon intensity of the economy and assist British businesses capitalise on the large predicted global demand for such products. The **Action Energy Programme** provided by the Carbon Trust and managed in Scotland by SEEO provides practical assistance to business and public sector organisations to assist them to reduce energy consumption. Recent impact analysis shows that the programme is saving an additional 25,000 tonnes of carbon each year.

³ Available on the Scottish Executive website at: www.scotland.gov.uk

⁴ Available on the Scottish Executive climate change website at: www.scotland.gov.uk/climatechange/

⁵ More information on the SEEO can be found on their website at: www.energy-efficiency.org

⁶ More information on the Carbon Trust can be found on their website at: www.thecarbontrust.co.uk

Scotland has the highest renewable energy potential in Europe which can be developed to benefit jobs and sustainability. Our current commitment is to achieve 18% of electricity generated by 2010 and support to the market is still necessary to achieve this. However, we believe that our policies and commitment, coupled with Scotland's natural resource and expertise, mean that producing as much as 40% of Scotland's electricity from renewable sources by 2020 is a realistic aim. We are consulting on this.

We have adopted an ambitious approach to the inclusion of sustainable development in all five European Structural Funds programmes for 2000-2006. An integrated methodology has been developed for building sustainable development into project preparation and appraisal systems, and appropriate training has been provided for those responsible for managing programmes. This has led to an increase in the significance of the issue within selection and scoring processes, and is intended to ensure that sustainable development is inherent in projects that are supported, rather than being added on.

We introduced improved Scottish Building Standards, relating to the conservation of fuel and power, on 4 March 2002. All new construction work, including alterations and extensions to existing buildings will need to be more energy efficient. The new standards for housing specify requirements for reduced heat-loss from the fabric and also relate to the energy efficiency of central heating boilers and controls for space heating and hot water. Projections indicate that energy savings of 25% for a typical dwelling will be achieved. There are additionally requirements to improve the commissioning of services in all non-domestic properties and limitations are placed on the use of air conditioning and mechanical ventilation. By the year 2010 the total annual savings resulting from these amendments is estimated to be 60,000 tonnes of carbon.

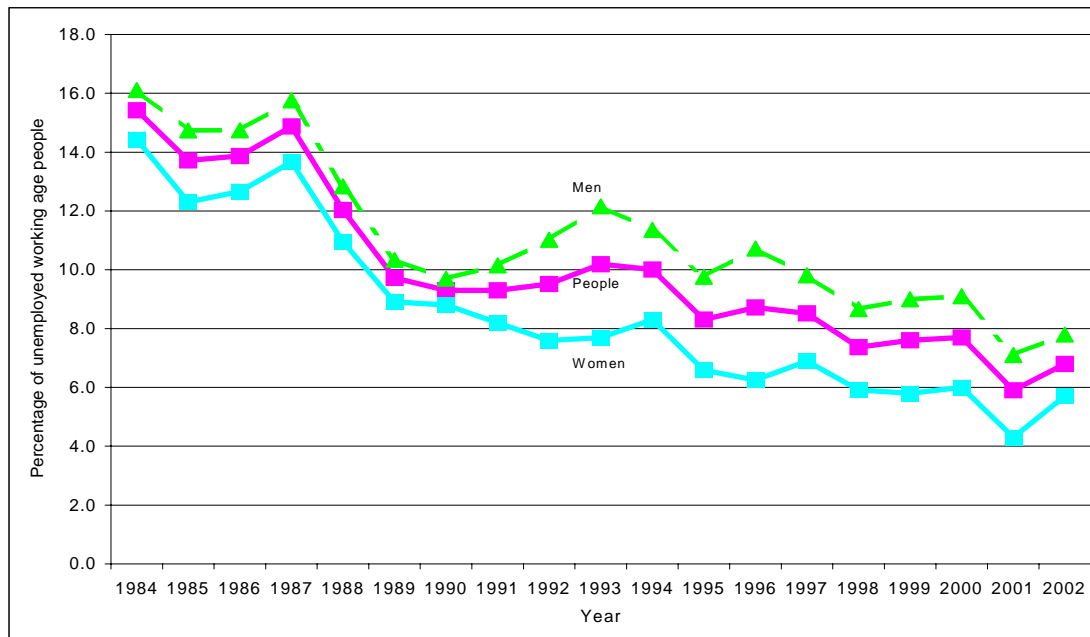
Sustainability is the cornerstone of our forestry policy. We own almost 40% of Scotland's forests, managed by the Forestry Commission, and all of these forests have been independently certified as sustainably managed through a process recognised by the Forestry Stewardship Council. By locking up carbon, forests help to reduce levels of greenhouse gases – thus contributing to delivery of the *Scottish Climate Change Programme*.

We need to examine all of our activities to ensure that they contribute to sustainable development. We want action across the whole of the Scottish Executive and throughout those public services and budgets which are devolved. A key part of this was to design our Spending Review in 2002 so that it contributes to sustainable development, ensuring that the very considerable financial resources being deployed really help us to meet the needs of Scotland, combining economic progress with social and environmental justice. The highlights of the Review and our resulting commitments to sustainable development are set out in *Building a Sustainable Scotland*⁷.

⁷ Available on the Scottish Executive website.

Indicator 2. Work: people as a resource

Percentage of unemployed working age people (Social Justice Milestone 13)



Percentage of unemployed working age people

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Men	11.0	12.2	11.4	9.8	10.7	9.8	8.7	9.0	9.1	7.1	7.8
Women	7.6	7.7	8.3	6.6	6.3	6.9	5.9	5.8	6.0	4.3	5.7
People	9.5	10.2	10.0	8.3	8.7	8.5	7.4	7.6	7.7	5.9	6.8

Source: Labour Force Survey: Office for National Statistics

The relevance of the indicator

A high employment rate is a key sustainable development objective. Employment enables people to meet their own needs and by contributing to the economy they benefit the whole of society.

Detailed definition and source details

The indicator is defined as the proportion of economically active people in Scotland who are unemployed according to the International Labour Organisation (ILO) definition. This definition counts as unemployed those aged 16 and over who are:

- without a job, are available to start work in the next two weeks and have actively sought work in the last 4 weeks; or
- waiting to start a job already obtained in the next 2 weeks.

These figures are taken each year from the spring quarter of the Labour Force Survey run by the Office for National Statistics, and published annually in the Scottish Executive publication *Social Justice ... A Scotland where everyone matters*¹.

Trends

Since 1984, the percentage of unemployed working age people in Scotland has been falling.

Further disaggregation

The trends for men and women are broadly similar. Since 1999, when urban and rural areas had similar ILO unemployment rates, 7.6% and 7.5% respectively, rural area rates have reduced whilst urban area rates have remained generally static (see the Annex for allocation of council areas to urban and rural).

Percentage of unemployed working age people in urban and rural areas

Year	1999	2000	2001	2002
Urban councils	7.6	7.9	6.1	7.6
Rural councils	7.5	7.2	5.2	5.0
Scotland	7.6	7.7	5.9	6.8

Source: Scottish Executive analysis of Labour Force Survey

Target

No target – a downward trend is desirable; we are committed to reducing the percentage of working age people who are unemployed.

Action

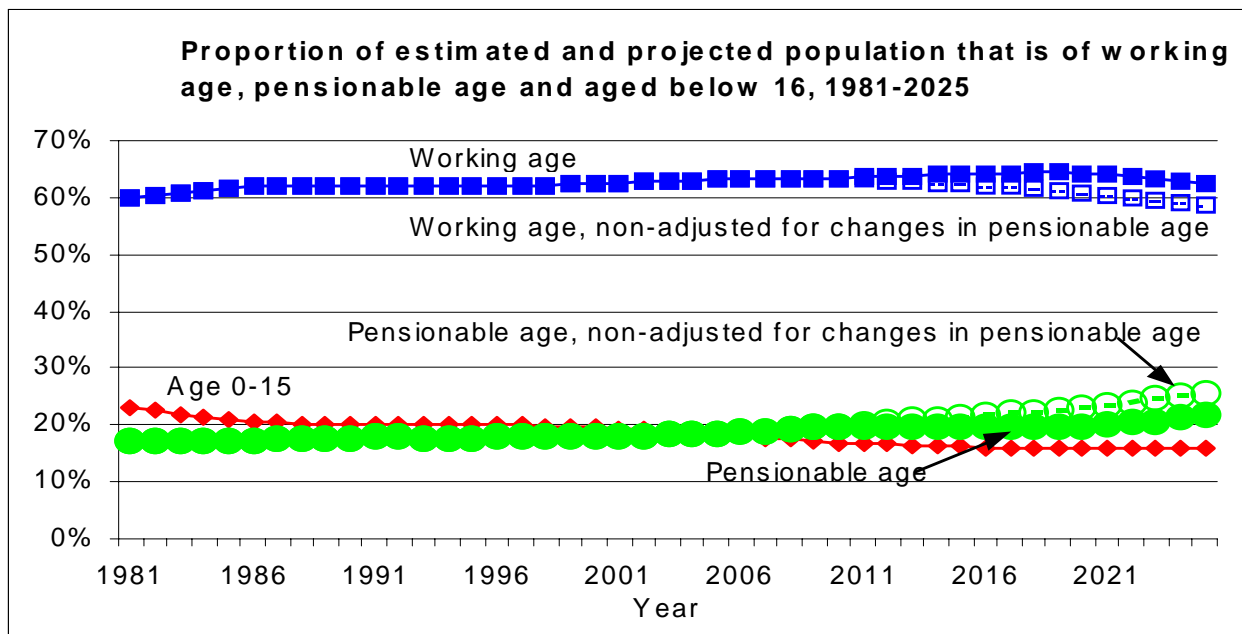
The New Deal programmes, delivered in partnership with the UK Government, have been instrumental in lowering unemployment by moving a variety of client groups into jobs. For example, 47,000 young people (18-24) in Scotland have gone into jobs, 13,700 long term unemployed adults (25 years plus), 17,200 from New Deal for Lone parents, and 10,300 from New Deal 50 plus.

In addition, a number of Scottish Executive Welfare to Work initiatives are contributing towards lowering unemployment, such as Training for Work, the New Futures Fund and the Glasgow Employment Zone for which we provide partial funding. However, it is clear that the general economic climate is of overarching importance in progress towards reducing the percentage of unemployed working age people.

¹ Available on the Scottish Executive website at: www.scotland.gov.uk/socialjustice/publications/

Indicator 3. Population structure

Proportion of population which is working age



Estimated and projected population

Age	1981	1991	2001	2011	2021	2025
0-15	22.9	20.0	19.2	16.9	16.4	16.3
Working age (adjusted)	60.0	62.2	62.2	62.8	63.1	61.5
Pensionable age (adjusted)	17.0	17.8	18.6	20.3	20.6	22.1

Source: GROS mid-year estimates and GAD 2001 based population projections

Notes: Working age for men is taken as 16-64 and for women 16-59 until 2010 rising to 16-64 in 2020.

Pensionable age is taken as all those above working age.

Non-adjusted figures in the chart do not take account of the changes to the retirement age of women between 2010 and 2020 that result in the equalisation of pensionable ages for men and women at 65 in 2020.

Figures for 1982-2000 are subject to revision. The publication of the 2001 mid-year estimates, based on the 2001 Census, indicated that the adjustments made for underenumeration in 1991 were excessive and need to be revisited and revisions for population estimates covering the series 1982-2000 will be made by end-February 2003. Although subject to revision, the trends presented here will not change.

The relevance of the indicator

A sustainable Scotland will include a balance of children, people of working age and older people. We need to ensure that we retain the talents and skills of people of all ages.

Choice of Indicator

The proportion of the population which is of working age will not only give an indication of the potential size of the workforce in Scotland, but will also gauge the degree of dependency within the economy (i.e. those who are not of working age).

Detailed definition and source details

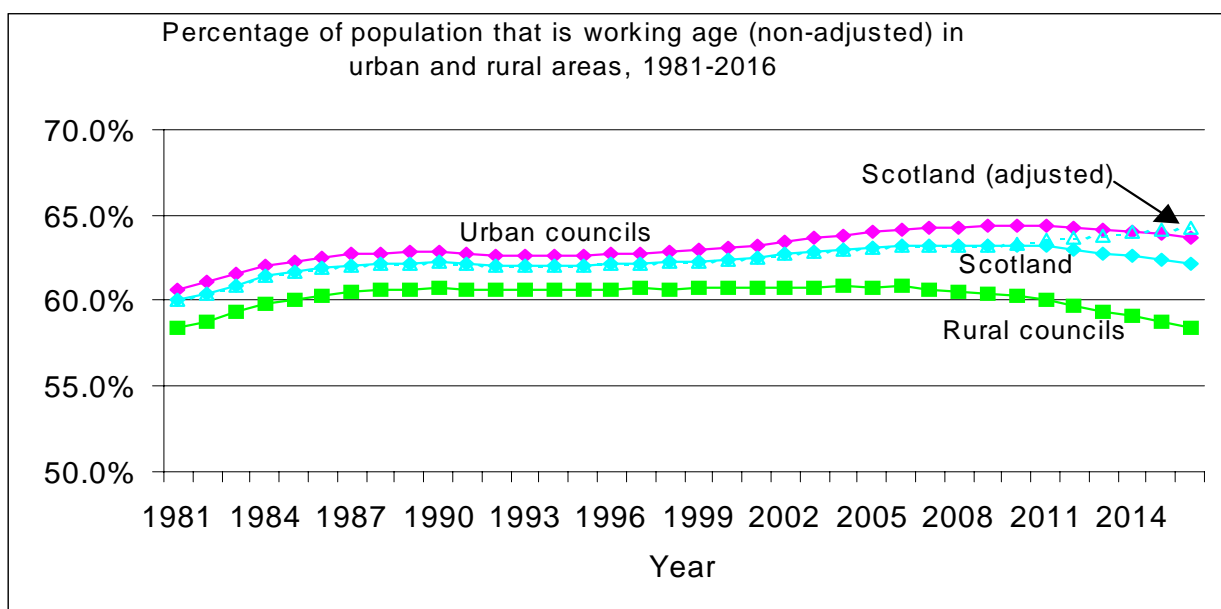
The indicator is defined as the proportion of the Scottish population that is of working age. Working age is currently defined as males aged 16-64 and females aged 16-59. Between 2010 and 2020 the pensionable age for women will increase in steps from 60 to 65, with a resulting increase in the number of people of working age. The data are taken from the Registrar General for Scotland's annual mid year population estimates for 1981-2001 and from the Government Actuary Department's (GAD) 2001-based population projections.

Trends

Following small increases in the early eighties, the percentage of the population that is working age has remained largely static at 62 per cent. This is projected to rise to 62.6% by 2010 and to peak at 63.4% in 2019, before falling to 61.5% in 2025. The chart shows that without the change in the retirement age of women, the projected percentage of people of working age would otherwise start to fall in 2011, dropping to 57.6% by 2025. The average age of the working population is projected to increase, with an increasing percentage aged over 50. Over the whole period the percentage of population below 16 is projected to fall (from 23% in 1981 to 16% in 2025), while the percentage of those of pensionable age will rise.

Further disaggregation

The data can be split into urban and rural areas on the basis of council area (see the Annex for allocation of council areas to urban and rural). The data for urban and rural areas shown are not adjusted for the increase in the pensionable age for women. The data can be further disaggregated by council area and gender and are available on the General Register Office for Scotland (GROS) website¹.



Source: GROS 2000-based population projections.

Note: Population estimates for 1982-2000 are subject to revision and will be available by end-February 2003. Although subject to change, the overall trend will not change.

¹ www.gro-scotland.gov.uk/grosweb/grosweb.nsf/pages/library

Target

No target - an assessment over time of the trend and rate of change will need to be made.

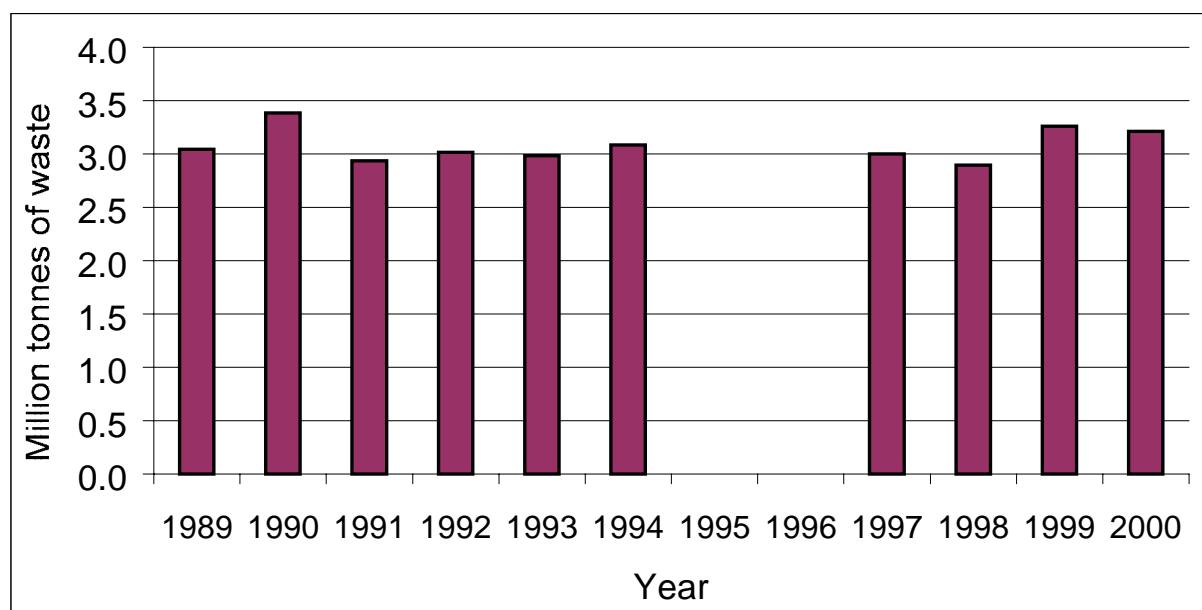
Action

We aim to maintain and foster the wide range of communities throughout Scotland, and to influence population trends, particularly the outflow of younger people. Ensuring that the right jobs are on offer within the Scottish economy will help encourage the young to stay and the more experienced to return. A more detailed outline can be found in the *Framework for Economic Development in Scotland*².

² Available on the Scottish Executive website at: www.scotland.gov.uk/socialjustice/publications/

Indicator 4. Waste: production

Municipal waste arisings in million tonnes of waste



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total municipal waste arisings (million tonnes)	3.0	3.4	2.9	3.0	3.0	3.1	N/A	N/A	3.0	2.9	3.3	3.2

Source: SEPA and Scottish Executive

Note: Data were not collected in 1995 and 1996 following transfer of responsibilities from The Scottish Office to SEPA.

The relevance of the indicator

Waste material represents a valuable resource. We need to reduce the amount of material we dispose of, and do more to minimise our waste, reuse it and recycle.

Detailed definition and source details

The indicator is defined as the amount of municipal solid waste collected by or on behalf of local authorities. In addition to household waste this includes any commercial and industrial waste collected by local authorities. Different methods have been used to collect the data over the years. Figures from 1989 to 1994 were extracted from Table A1.2 of the Scottish Office Bulletin for 1994. The 1997 and 1998 figures were taken from a study for SEPA and the Scottish Executive¹. The 1999 data were estimated by SEPA using data available through the local Strategic Waste Management Baseline Assessment reports and by contacting the local authorities. Since 2000, data have been collected by SEPA. The 2000 data refer to financial year 2000-2001 and are provisional.

¹ Available on the Scottish Executive website at: www.scotland.gov.uk/cru/resfinds/erf9-00.asp

Trends

Since 1989, the amount of municipal solid waste arisings has varied between 2.9 million and 3.4 million tonnes per year. The latest estimate is 3.2 million tonnes in financial year 2000-2001. Data from other parts of the UK indicate that waste production has been rising at a rate of 2-3% per annum but this is not apparent from the Scottish data. It is not clear whether the Scottish data is reliable enough to assume that Scottish waste production is not also growing.

Further disaggregation

Further disaggregation of these figures is now possible through SEPA's annual survey of local authority waste management which is summarised in the annual *Waste Data Digest*².

Target

An initial target was suggested in the *National Waste Strategy: Scotland in 1999*² which was to aim to reduce municipal waste production by 1% per annum. We have reviewed this target in the light of the area waste planning process that has developed the forthcoming National Waste Plan. This involved detailed consideration of potential growth rates and the main factors which influence this (e.g. population, household size, and consumer behaviour). It is clear in the light of that, and of trends elsewhere in the UK, that there are no simple means of reducing waste growth and that measures by local authorities and others to reduce waste production, such as educational awareness programmes, will need to be sustained over many years. Accordingly the National Plan will set a revised target for municipal waste reduction of achieving zero growth by 2010. Depending on how quickly progress can be made to reduce waste growth, this should mean that no more than 3.5 million tonnes of municipal waste would be produced in 2010.

Action

We have established a Strategic Waste Fund to assist local authorities in implementing Area Waste Plans under the National Waste Strategy and have allocated £230m over the next 3 years (2003-04 to 2005-06)². Eleven draft AWP's have been developed as part of the National Waste Strategy to determine the Best Practicable Environmental Option (BPEO) for dealing with waste in each area. All eleven AWP's have included some form of waste minimisation as part of the BPEO.

SEPA's waste data strategy is being implemented to provide a robust set of waste data on municipal and other wastes. This will inform future waste management planning and allow more accurate tracking of waste production.

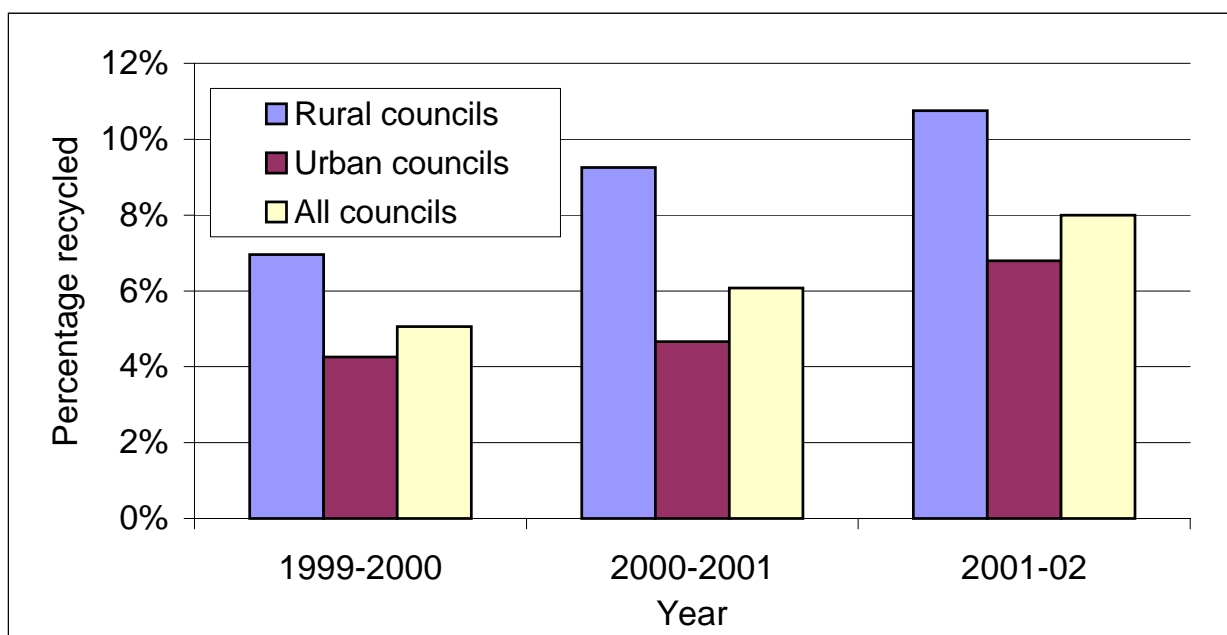
We are also working with SEPA and the National Resource and Waste Forum³ to plan a major waste prevention programme for municipal solid waste in Scotland.

² More information is available on the SEPA website at: www.sepa.org.uk

³ Available on the internet at: www.nrwf.org.uk

Indicator 5. Waste: recycling

Percentage of total household waste recycled



Percentage of total household waste recycled in rural and urban councils

Year	1999-2000	2000-2001	2001-02
Rural councils	7.0%	9.3%	10.8%
Urban councils	4.3%	4.7%	6.7%
All councils	5.1%	6.1%	8.0%

Source: Accounts Commission for Scotland

The relevance of the indicator

Increasing recycling of materials is part of our strategy to improve resource efficiency — doing more with less.

Choice of Indicator

No common indicator is used internationally to measure recycling of household waste. In some countries the measure relates to municipal waste, in others construction waste is included. In Scotland, this indicator is based on estimates of household waste provided by local authorities.

Detailed definition and source details

The indicator is defined as the percentage of household waste, collected by or on behalf of councils, that is recycled. It excludes both commercial and industrial waste that is recycled and household waste that is composted by households. Councils obtain waste material for recycling in three ways - through collections at recycling centres (eg bottle banks, paper banks), by separate house-to-house collection of recyclable materials or by separating waste

after collection. The Accounts Commission sets out how local authorities should measure indicators in formal instructions each year¹.

Trends

In 2001-2002, 8.0% of household waste was recycled, which is a slight improvement (increase of 1 percentage point) on the previous year. A further 2.4%, the same amount as the previous year, was used for the recovery of heat, power or other energy sources.

Further disaggregation

Data are available for individual council areas from 1998-99. Rural councils generally recycle more household waste than urban councils and, in 2001-2002, 10.8% of household waste in rural councils was recycled compared with 6.7% of household waste in urban councils. Ten councils reported recycling more than 10% of household waste. 22 councils (eight more than the previous year) collected household green waste, which was composted centrally. (See the Annex for allocation of council areas to urban and rural)

Target

To recycle and compost 25% of municipal waste by 2006.

Action

We are taking powers for Ministers to set targets in the *Local Government in Scotland Bill* and to require local authorities to prepare Integrated Waste Management Plans to meet the targets. We have established a Strategic Waste Fund to assist local authorities in implementing Area Waste Plans under the National Waste Strategy and have allocated £230m over the next 3 years (2003-04 to 2005-06).

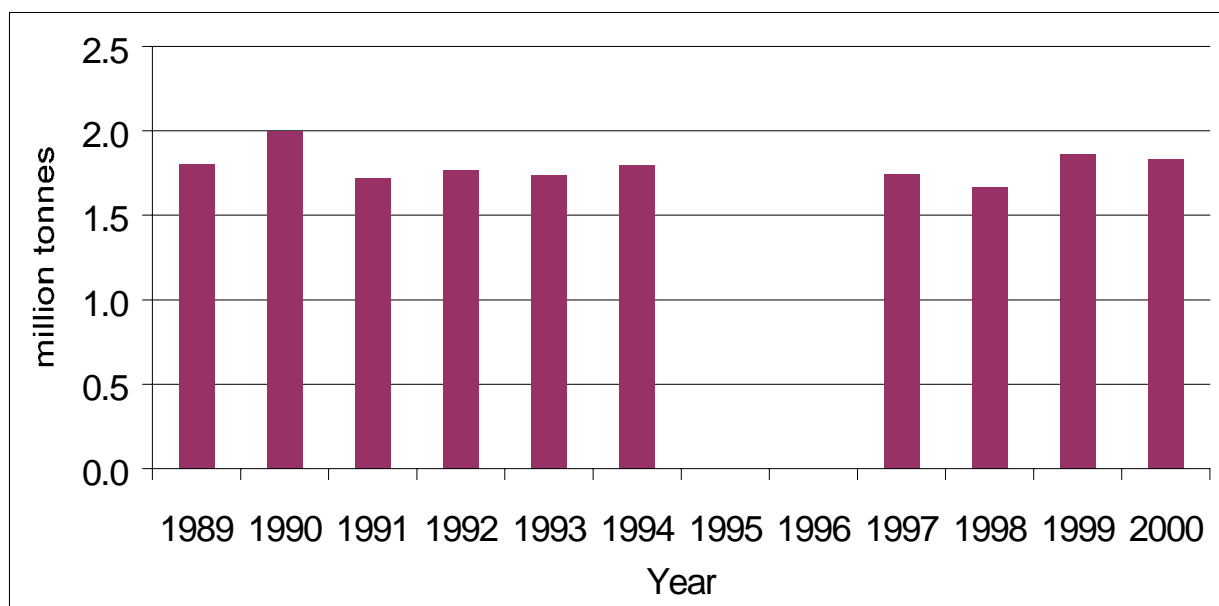
A major publicity campaign to encourage the public to reduce, reuse and recycle was launched as the second phase of our *Do a little, change a lot* environmental awareness campaign² in September 2002. The Scottish Waste Awareness Group, for which we provide support, is also developing the *Waste Aware Scotland* campaign for use by local authorities as improved recycling facilities are introduced. In addition, we distributed £6m to local authorities in December 2002 for recycling and composting initiatives.

¹ Accounts Commission for Scotland (2003): Performance Indicators 2001/2002 - "Environmental and regulatory services: comparing the performance of Scottish Councils" - www.accounts-commission.gov.uk/performance/documents/pamphlets/03pi06ac.pdf

² The campaign website can be found at: www.dochange.net

Indicator 6. Waste: landfilled

Biodegradable municipal wastes landfilled in million tonnes



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Biodegradable municipal wastes land-filled (million tonnes)	1.8	2.0	1.7	1.8	1.7	1.8	N/A	N/A	1.7	1.7	1.9	1.8

Source: SEPA and Scottish Executive

Note: Data were not collected in 1995 and 1996 following transfer of responsibilities from the Scottish Office to SEPA.

The relevance of the indicator

The bulk of our waste goes to landfill. This represents a waste of useful material as well as a blight on the communities who live near landfill sites. Our priority is to reduce landfilling of biodegradable waste.

Detailed definition and source details

The indicator is defined as the amount of biodegradable municipal wastes landfilled assuming that 60% of municipal solid waste is biodegradable. The 2000 data refer to financial year 2000-2001 and are provisional. Full details of the source of data on municipal solid waste is given in Indicator 4.

Trends

Since 1989, the amount of biodegradable municipal waste has varied between 1.7 million and 2.0 million tonnes per year. The latest estimate is 1.8 million tonnes in financial year 2000-2001.

Further disaggregation

Further disaggregation of these figures is not currently possible.

Target

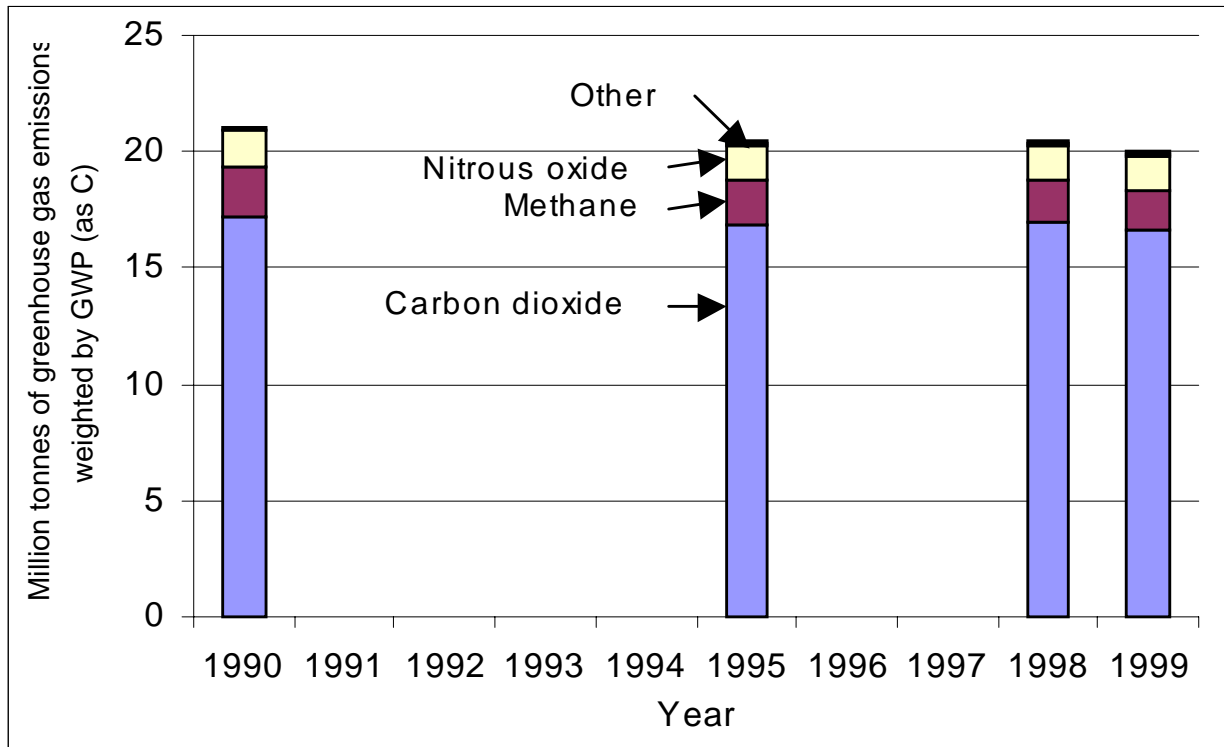
To reduce the amount of biodegradable municipal wastes landfilled to 1.25 million tonnes by 2010. This target is based on the 2010 Landfill Directive target to reduce biodegradable municipal wastes landfilled to 75% of reported 1995 levels and the assumption that 60% of municipal waste is biodegradable. The reported level of municipal waste landfilled in 1995 was 2.8 million tonnes.

Action

The National Waste Strategy sets the context for action on reducing landfill. The Area Waste Plans and the National Waste Plan will set out the alternative disposal routes that will be developed, including increased composting of biodegradable waste. A system of landfill allowances is being introduced that will place limits on the individual authority's use of landfill.

Indicator 7. Climate Change

Million tonnes of greenhouse gases carbon equivalent (weighted by Global Warming Potential)



Year	1990	1995	1998	1999
Carbon dioxide (CO₂)	17.2	16.9	17.0	16.6
Methane (CH₄)	2.1	1.9	1.8	1.7
Nitrous oxide (N₂O)	1.6	1.5	1.5	1.5
Hydrofluorocarbons (HFCs)	0.0	0.03	0.09	0.1
Perfluorocarbons (PFCs)	0.07	0.14	0.07	0.07
Sulphur hexafluoride (SF₆)	0.02	0.03	0.03	0.03
Total	20.9	20.4	20.4	19.9

Source: NETCEN

Note: Totals may not sum due to the effect of rounding. Scottish carbon dioxide emissions were first published in 2000 for 1990 and 1995. Scottish emissions data for 1998 and subsequent years, are being published annually.

The relevance of the indicator

Our climate in Scotland is changing to become wetter and wilder. The changing climate is associated with the emission of greenhouse gases. We need to act to reduce those emissions and to deal with the harmful consequences of climate change such as flooding.

Detailed definition and source details

Parties to the United Nations Framework Convention on Climate Change are obliged to compile inventories of the six greenhouse gases targeted by the Kyoto Protocol. The inventories are based on emission source and sink categories agreed by the Intergovernmental Panel on Climate Change. Different greenhouse gases have varying capacities to cause global warming. The Global Warming Potential (GWP) provides a measure of the relative radiative effects of the emission of various greenhouse gases, accounting for the potency of the gas as well as the amount emitted. It is possible to estimate the overall global warming effect of Scottish greenhouse gas emissions by weighting the emission of each gas by its GWP. SF₆, PFCs and HFCs are the most potent, with GWP up to several thousand times greater than carbon dioxide, although, as the table shows, carbon dioxide is by far the most significant. Data for 1990, 1995, 1998 and 1999 were taken from the report compiled by NETCEN for the Department for Environment, Food and Rural Affairs (Defra) and the devolved administrations¹. Emissions projections are also discussed in the Jan 2002 edition of the *Scottish Economic Report*²

Trends

Total greenhouse gas emissions for Scotland fell by 4.8% between 1990 and 1999 to 19.9 million tonnes of carbon equivalent. 1999 emissions of UK greenhouse gases were 14% below their 1990 levels. DTI produces projections of energy use and carbon emissions. For 1990-2020, steady growth is expected in energy use, albeit at a rate lower than that of economic growth. Due to the size of the Scottish economy, the results for emissions are extremely sensitive to potential investment changes in the market for electricity generation. Amongst other pertinent considerations are what happens to the flow of electricity through the interconnector, and the effect that changes in world oil prices can have on the relative competitiveness of coal. These issues, along with the fact that all modelling is subject to uncertainty, make projections for carbon emissions in Scotland a very imprecise art. Based on work done for the Scottish Executive we can, however, estimate that the combined effects of the UK and Scottish Climate Change Programmes in Scotland would lead to a reduction on 1990 emissions levels by 2010 ranging from 4.7 per cent to 16.6 per cent.

Further disaggregation

In 1999, Scotland's contribution of carbon dioxide was 16.6 million tonnes of carbon equivalent (11.1% of the UK total), a fall of 0.6 million tonnes from 1990. The largest source of carbon dioxide emissions is from the energy sector, whilst the combination of agriculture, forestry and land use is the second largest source. Total emissions of methane are declining and have fallen by 18% from 1990 to 1999. The major sources of methane are waste disposal, coal mining, leakage from the gas distribution system and agriculture.

The chart and table on p.17 show how different greenhouse gases contribute to the total. Further disaggregation by source is shown in the table on p.19.

¹ Salway, A.G., Murrels, T. P., Pye, S., Watterson, J. & Milne, R. (2001) "Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990-1999". NETCEN, AEATechnology, AEAT/R/ENV/0772.

² Available on the Scottish Executive website at: www.scotland.gov.uk/library3/finance/ser5-09.asp

Million tonnes of greenhouse gas emissions in Scotland by sector, weighted by Global Warming Potential (carbon equivalent)

Year	1990	1995	1998	1999
Energy sector	5.1	5.8	6.0	5.7
Business sector	4.9	3.9	3.6	3.5
Transport sector	2.5	2.7	2.6	2.5
Domestic sector	2.0	2.0	2.0	2.1
Agriculture, forestry & land use	5.6	5.6	5.7	5.6
Public sector	0.7	0.6	0.5	0.4
Total	20.9	20.4	20.4	19.9

Source: NETCEN

Note: Totals may not sum due to the effect of rounding.

Target

The Scottish Executive is committed to making an equitable contribution to the UK Kyoto target of a 12.5% reduction in 1990 levels of UK greenhouse gas emissions by 2008-2012.

Action

We published the *Scottish Climate Change Programme*³ in November 2000. The Programme sets out the measures that will deliver Scotland's contribution to the UK Climate Change Programme, aimed at meeting the UK Kyoto commitment and moving the UK as a whole toward the domestic goal of a 20% reduction in carbon dioxide emissions by 2010.

Raising awareness of climate change issues in Scotland is an important element of the *Scottish Climate Change Programme*. Climate change features as part of our *Do a little, change a lot* environmental awareness campaign⁴. This element of the campaign seeks to make the link between everyday actions and climate change by encouraging domestic energy efficiency and reduced car use for short journeys. An interactive website, designed for Scottish schoolchildren, was developed for the Scottish Executive and is available at www.ltscotland.com/climatechange.

³ Available on the Scottish Executive climate change web-site at: www.scotland.gov.uk/climatechange/

⁴ The campaign website can be found at: www.dochange.net.

Indicator 8. Air Quality

Number of Air Quality Management Areas (AQMAs)

Year	2000	2001	2002
Number of AQMAs	1	3	3

Source: Scottish Executive

Note: The variance in the number of AQMAs between 2000 and 2001 does not indicate poorer air quality. It is simply related to a later completion of the review process by some local authorities.

The relevance of the indicator

Scotland has a good record on air quality but we can do better. Controlling air pollution is a key sustainable development objective in order to reduce the risks of harm to our health and environment.

Choice of indicator

The Department for Environment, Food and Rural Affairs (Defra) and the devolved administrations' air quality indicator for the UK is a measure of the number of days per year on which air pollution is moderate or higher. There is an insufficient number of monitoring sites in Scotland for a similar indicator to be meaningful and we have therefore used the number of AQMAs against which to measure progress.

Detailed definition and source details

An AQMA¹ is declared by a local authority where the air quality objective for one or more of the eight pollutants in the Air Quality Strategy is unlikely to be met by the specified date. As such, the number of AQMAs provides an overview of air quality trends in Scotland. The information is derived from the air quality review and assessment reports which local authorities are required to produce.

Trends

The first AQMA was declared in December 2000 and there are no discernible trends to date.

Further disaggregation

The three AQMAs are in Aberdeen, Edinburgh and Glasgow. In areas without AQMAs, indications are that all the Air Quality Strategy objectives will be met by the prescribed dates. There are no further historical data available.

Target

To have only one AQMA in Scotland by 2010.

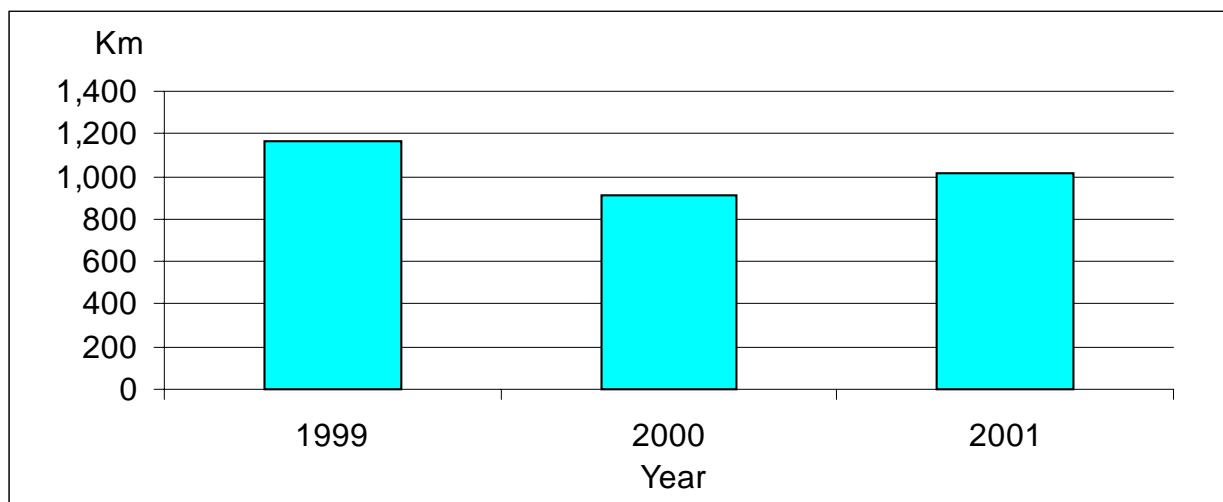
¹ More information on AQMAs is available on the Scottish Executive website at: www.scotland.gov.uk/environment/airquality/publications/2000/strategy/aqs2000.asp

Action

All local authorities declaring AQMAs must draw up action plans outlining how they intend to work towards the objectives. We are working closely with the authorities concerned as they develop their plans.

Indicator 9. Water Quality

Kilometres of river identified as "poor" or "seriously polluted"



Year	1999	2000	2001
Poor	1,078km	842km	929km
Seriously polluted	91km	74km	83km
Total of poor or seriously polluted	1,169km	916km	1,012km
Length of digitised river network	25,382km	25,455km	25,511km

Source: SEPA

The relevance of the indicator

Sustainable development means managing our impact on the environment. River quality is important because rivers are a major source of water used for drinking and by industry and leisure. Rivers also support a wide variety of wildlife.

Choice of indicator

It is important that all poor quality or seriously polluted waters are improved. Overall, water quality in Scotland is good; this indicator therefore only reports on the categories of river water quality where action is needed to rectify problems.

Detailed definition and source details

The data used for classification are those obtained from planned programmes of monitoring, including any such samples affected by pollution incidents. River quality is classified in km as excellent (A1), good (A2), fair (B), poor (C) and seriously polluted (D). Data are based on the Scottish Environment Protection Agency's (SEPA's) new Digitised River Network¹ which comprises those watercourses draining a catchment of 10 km² or more, supplemented by those watercourses draining smaller catchments which SEPA are monitoring because their quality has recently been classed as fair, poor or seriously polluted.

¹ More information can be found on the SEPA website at: www.sepa.org.uk

River water quality is assessed in 4 measurements: biological, chemical, nutrients (toxicity) and aesthetic. The classification scheme is 'default based', i.e. the overall class of a watercourse at a particular sampling point defaults to the poorest class determined from these 4 quality measurements.

Trends

Although there are variations from year to year in water quality, the overall trend is of improvement. SEPA has set improvement targets; for the period from 1999 to 2001 there has been a reduction of 157 km of class C and D rivers. Quality assessments are made on a year's data, except for chemical classification, for which the data is extended back over 3 years to avoid undue bias resulting from (wet/dry) weather fluctuations. Poor biological quality and nutrient status are the most frequent reason for waters to be classified as poor or seriously polluted. There are a wide range of reasons for this, but primarily it is due to industrial and sewage pollution, as well as problems of agricultural pollution from run off of organic waste and inorganic fertilisers.

Further disaggregation

Further disaggregation of these figures is not currently possible

Target

SEPA are taking action to improve the worst affected rivers first; the overall target for 1999 to 2006 is to reduce the lengths of C (poor) and D (seriously polluted) class rivers by 351 kilometres.²

Action

We plan to extend the monitoring information to protect good and excellent quality waters as part of the river basin management plans in the Water Environment and Water Services (Scotland) Bill.

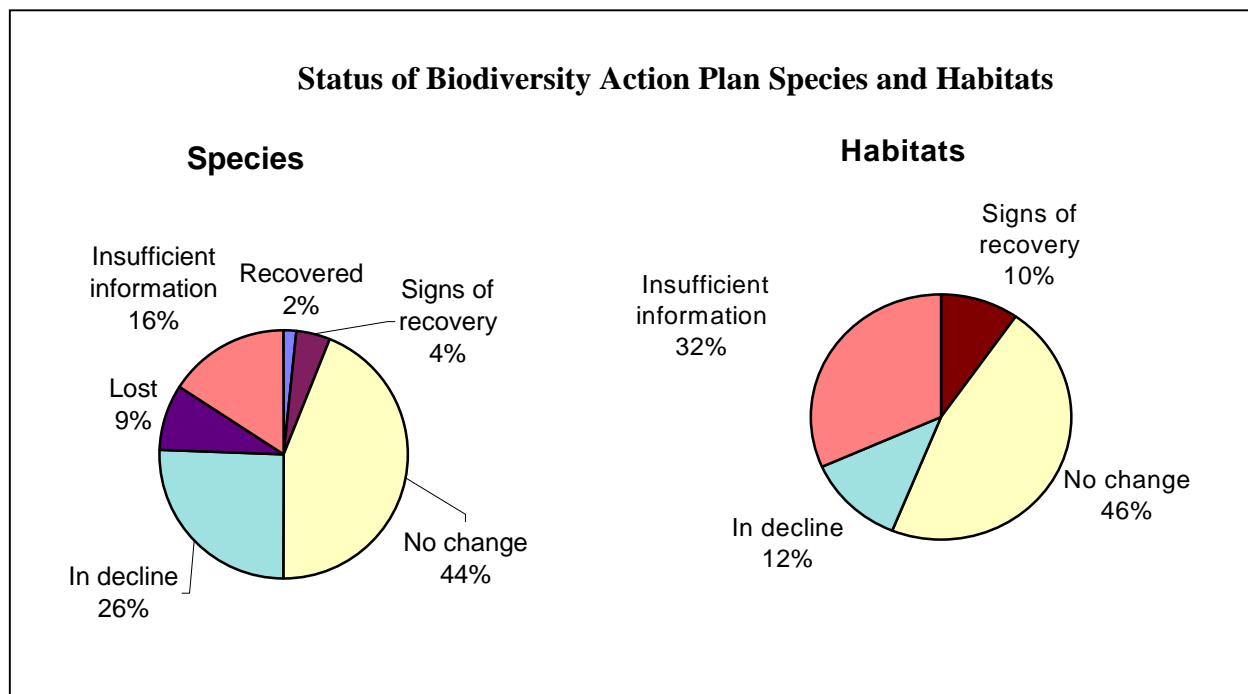
The Executive has worked with stakeholders to introduce measures to mitigate and reduce water pollution problems resulting from urban and agricultural diffuse pollution, with specific action in nitrate vulnerable zones (NVZs) and for bathing waters. In particular, the Sustainable Urban Drainage Manual and the 4 Point Plan, which was launched on 18 November, provide advice to help protect the water environment.

In terms of actions to mitigate sewage pollution, the Quality and Standards process sets out the environmental and drinking water standards the water authority must meet and estimates the investment that is required. We are investing in secondary sewage treatment for more than 80% of Scotland's population. Additionally, under the Water Industry (Scotland) Act 2002, the aim is to have a sustainable development policy prepared early in 2003.

² The target published in *Meeting the Needs...* was to improve 315km by 2006-07.

Indicator 10. Biodiversity

Percentages of Biodiversity Action Plan species and habitats which are identified as stable or increasing



	Species		Habitats	
	Number	Percentage	Number	Percentage
Stable or recovering	92	50%	23	56%
Recovered	3	2%	0	0%
Signs of recovery	8	4%	4	10%
No change	81	44%	19	46%
In decline	47	26%	5	12%
Lost	16	9%	0	0%
Insufficient information	29	16%	13	32%
Total	184	100%	41	100%

Source: Scottish Natural Heritage

Note: Totals may not add up to 100% because of rounding figures to whole numbers.

The relevance of the indicator

The biodiversity of the planet is a vital resource for our future. Making Biodiversity Action Plans successful is a key task in protecting biodiversity in Scotland.

Detailed definition and source details

Following the introduction of the UK Biodiversity Action Plan in 1995, Lead Partner reports began in 1999 to enable an appraisal of performance against the biodiversity action plans for the key habitats and species. Due to the incomplete adoption of the Action Plans for all species and habitats, this reporting programme was incomplete. The biodiversity figures

published in *Meeting the Needs...* were based on this reporting programme. However an analysis of the reports relevant to Scotland was made in 2002 to Ministers and the Scottish Biodiversity Forum in *Biodiversity in Scotland*¹. This is the basis of the present figures. As noted below, an improved reporting process will begin in 2003.

Trends

50% of BAP species and 56% of BAP habitats were identified as stable or increasing in 2001.

Further disaggregation

No further disaggregation is currently possible at this time. The Scottish Biodiversity Forum² intends to develop a full suite of indicators to cover the biodiversity process in Scotland.

Target

No current target - targets to be developed as part of ongoing work identified below.

Action

An improved reporting process has been developed and will be piloted in 2003 for adoption in the next scheduled reporting round in 2005. Analysis of the 2003 pilot data may allow some intermediate appraisal of progress.

The Scottish Biodiversity Forum will submit a draft Strategy for Scotland's Biodiversity to Ministers at the next meeting of the Forum in February 2003. A full consultation is envisaged thereafter. The strategy will establish the framework for the development of targets for the biodiversity process to 2010 and beyond.

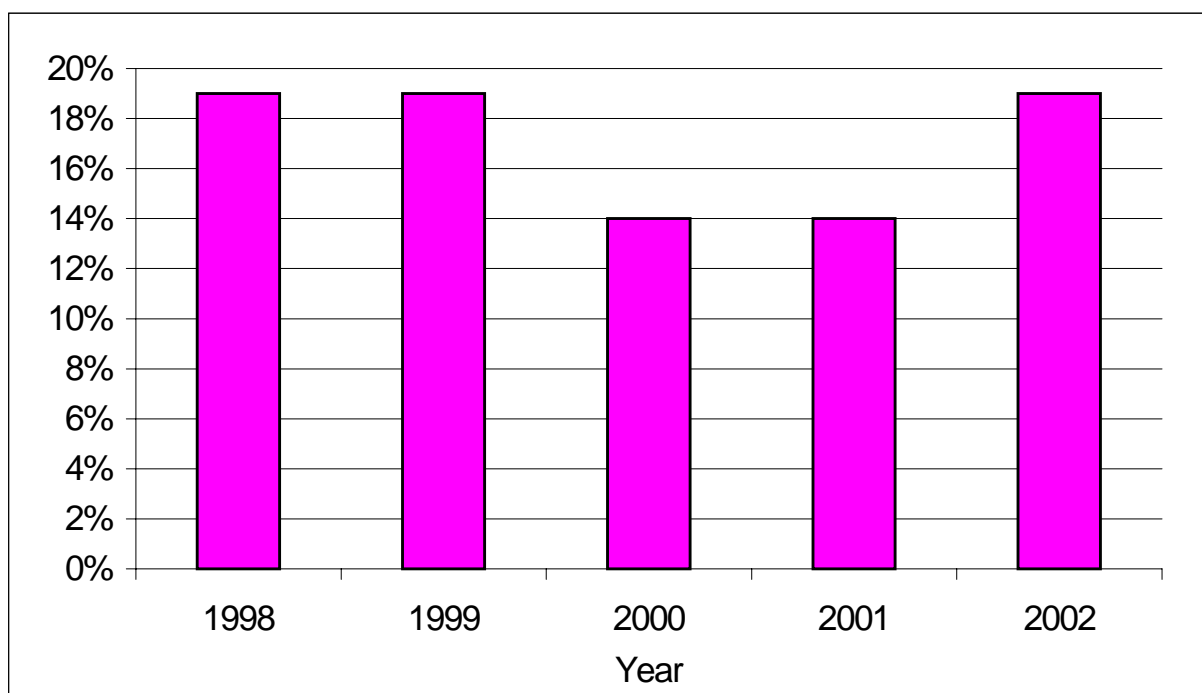
The key strategic aim of the Strategy for Scotland's Biodiversity is to achieve by 2010 a significant reduction in the current loss of biological diversity in Scotland. This accords with international commitment made at the 2002 World Summit on Sustainable Development. Measuring changes against targets for key species and habitats will provide a measure of the success of how biodiversity in Scotland is being protected and sustained.

¹ Available on the Scottish Executive website at: www.scotland.gov.uk

² More information on the Scottish Biodiversity Forum is available on their website at: www.scotland.gov.uk/biodiversity

Indicator 11. Sea fisheries

Proportion of fish stocks which are within safe biological limits



Year	1998	1999	2000	2001	2002
Number of fish stocks within safe biological limits	4	4	3	3	4
Number of fish stocks	21	21	21	21	21
Proportion of fish stocks within safe biological limits	19%	19%	14%	14%	19%

Source: Fisheries Research Services and ICES

Note: The 21 monitored fishstocks are: North Sea Cod, West of Scotland Cod, North Sea Haddock, West of Scotland Haddock, Rockall Haddock, North Sea Whiting, West of Scotland Whiting, Saithe – VI + IV + IIIa, Northern Hake, North Sea Anglerfish, West of Scotland Anglerfish, North Sea Herring, Western Mackerel, North Sea Mackerel, North Sea Norway Pout, North Sea Sandeel, Northern Blue Whiting, Blue ling Sub-area VI, Tusk Sub-area VI, Roundnose grenadier Sub-area VI, Black scabbard fish Sub-area VI and Orange roughy Sub-area VI.

The relevance of the indicator

We need to live within the capacity of the planet to sustain our activities and replenish resources which we use. Sea fisheries is a key area where this applies.

Choice of Indicator

Many marine fish stocks have been monitored over a long time period and therefore good quantitative data are available. The indicator used is a standard measure used by the International Council for the Exploration of the Sea (ICES) to classify the state of exploited fish stocks.

Detailed definition and source details

‘Safe biological limits’ are defined by a minimum safe stock size and a maximum exploitation rate. These are known as reference points. The stock size is measured in terms of ‘spawning stock biomass (SSB)’ which represents the total weight of spawning fish each year. The exploitation rate is called the ‘fishing mortality (F)’ which measures the rate at which fish are removed from the stock by fishing. If the stock is either below the minimum safe SSB or above the maximum safe F, the stock is said to be outside safe biological limits.

The definitions of the reference points are given by the Advisory Committee for Fishery Management (ACFM). This is an ICES committee and copies of the relevant reports can be found on the ICES website¹.

Trends

The available data suggest that the number of stocks outside safe biological limits is increasing, implying a gradual worsening of the indicator.

Further disaggregation

The four stocks currently within safe biological limits in Scottish waters are Norway Pout, Sandeel, North Sea Herring and Saithe. Some of those stocks which are outside safe biological limits, such as Cod, Haddock, Plaice and Whiting for example, are particularly at risk (ie close to collapse). No further disaggregation of the information held is possible.

Target

No current target - but our ambition is to ensure that all major species in Scottish waters are within safe biological limits.

Action

Formally, competence in the management of stocks beyond 6 miles of the coast lies with the European Union. For many important Scottish stocks in the North Sea, management responsibility is shared between EU and Norway.

The recent review of the Common Fisheries Policy agreed several important measures to increase sustainability of stocks, including effort limitations on directed fishing for stocks outside safe biological limits and multi-annual management plans for all stocks. Scottish Executive remains fully involved in a continuing review which includes consideration measures designed to reduce discarding of undersized fish and the integration of broad environmental protection measures into the Common Fisheries Policy.

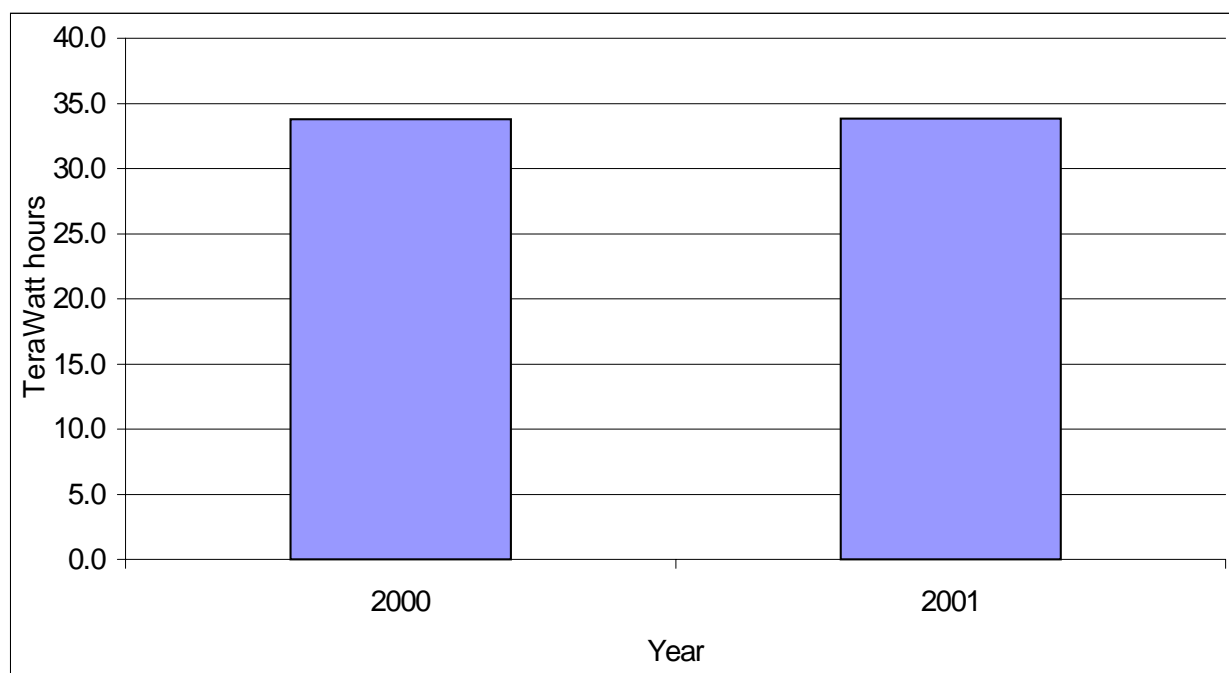
We work closely with DEFRA and the scientific community to influence Commission and Council fisheries policy.

We also take unilateral action to improve things for stocks where Scotland takes the largest share. Alone in the EU, Scotland has banned the use of strengthening bags and places autonomous restrictions on multiple rig trawling. We were the first country in Europe to introduce mandatory 90mm square mesh panels.

¹ www.ices.dk

Indicator 12. Energy: consumed

Electricity consumed in TeraWatt hours



	Year	2000	2001
Electricity consumed in TeraWatt hours		33.8	33.8

Source: Department of Trade and Industry

Note: In *Meeting the Needs...* energy consumed was measured in GigaWatt hours. We have switched to TeraWatt hours for ease of use. One TeraWatt hour is equal to 1000 GigaWatt hours.

The relevance of the indicator

Delivering a more sustainable economy requires doing more with less. We are doing a great deal to encourage greater energy efficiency. An energy use figure is currently not available at Scotland level, so we are using electricity consumed as a proxy measure.

Choice of indicator

Detailed information on different types of energy consumed in Scotland is not currently available. The Department of Trade and Industry (DTI) are presently investigating the feasibility of producing sub-UK energy consumption estimates by fuel and end user¹.

Detailed definition and source details

The indicator is defined as total energy generated in Scotland adjusted for exports and imports, own use in power stations by generators, and transmission and distribution losses. The data are supplied to DTI by the electricity generating companies and includes autogeneration (generation by those companies whose main business is not the generation of

¹ More information is available on the Department of Trade and Industry website at: www.dti.gov.uk/energy/inform/regional_energy/index.shtml

electricity, the electricity being produced mainly for that company's own use). The figure provided in *Meeting the Needs...* was based on information collected by the Scottish Executive and published in *Key Scottish Environment Statistics*². This data excludes autogenerators, who generate a significant proportion of the electricity generated and consumed in Scotland. We have therefore begun to use the more complete data provided by the DTI, who have been able to provide Scottish figures for 2000 and 2001.

Trends

Demand tends to remain fairly consistent over time.

Further disaggregation

The data source does not allow for the further disaggregation of the information held.

Target

No target - but commitment to reduce the amount of non-renewable energy consumed in Scotland.

Action

We provide funding, through the Scottish Energy Efficiency Office³ (SEEO), for the Energy Saving Trust⁴ (EST) whose office in Scotland coordinates a programme of work to improve domestic sector energy efficiency. In 2001 we increased funding for ESTs work in improving energy efficiency in domestic properties by 28%.

We also provide funding through SEEO for the Carbon Trust's activities in Scotland. The Carbon Trust⁵ runs programmes aimed at encouraging reductions in business energy consumption and fostering research into low carbon technology.

Highlights of both Trusts' work on improving energy efficiency include:

- The work of Scotland's eight **Energy Efficiency Advice Centres (EEACS)**. In 2001 the centres provided advice to more than 66,000 customers who typically reduced their annual energy bills by more than £26 each. Carbon savings as a result of the advice given to Scottish EEAC clients in 2001 were 6474 tonnes.
- Continued promotion of the **Loan Action Scotland** scheme, funded separately by the SEEO and managed by the EST. This provides interest-free loans for energy efficiency works to small to medium enterprises (SMEs). Loans totalling £385,000 were made in 2001 which will lead to savings of 330 tonnes carbon/year and financial savings of c£120,000/year.
- The **Community Energy Programme (CEP)** supports development and capital expenditure on district heating systems, which give significant energy savings compared to individual heating systems. It is a UK-wide programme, jointly managed by the

² Available on the Scottish Executive website at: www.scotland.gov.uk

³ More information on the SEEO is available on their website at: www.energy-efficiency.org

⁴ More information on the EST is available on their website at: www.est.org.uk

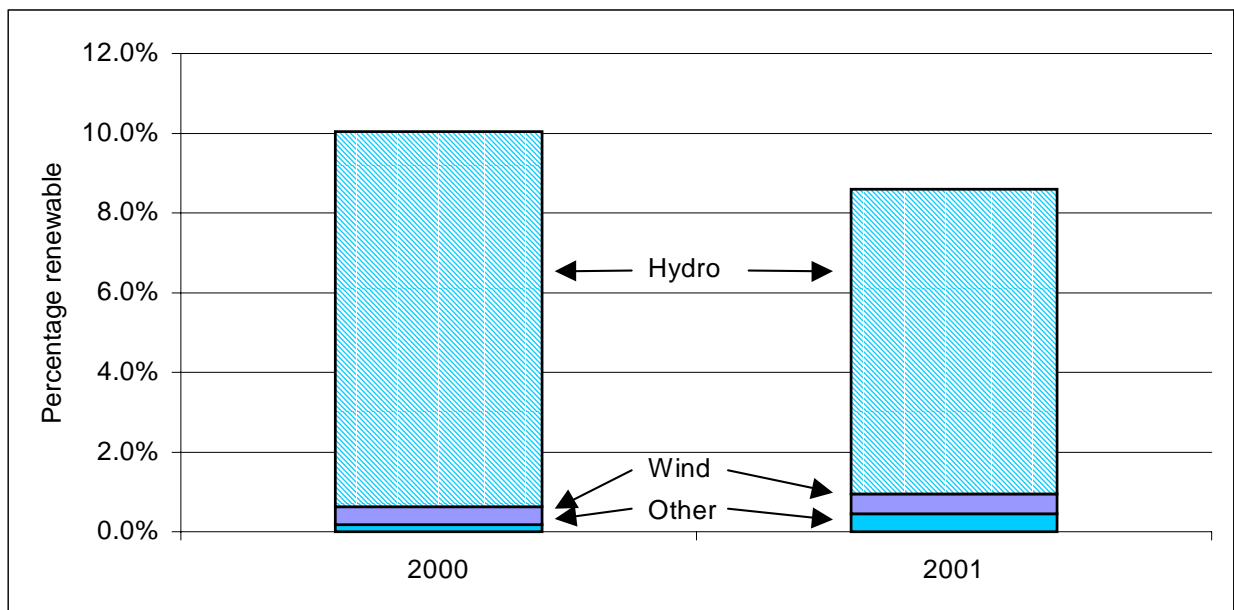
⁵ More information on the Carbon Trust is available on their website at: www.thecarbontrust.co.uk

Energy Saving Trust and the Carbon Trust and funded through Defra using Capital Modernisation Fund monies. The Scottish Executive has, through the EST, supplied additional resources to promote the CEP in Scotland and to date £1.6million (more than 40% of total funding awarded UK-wide) has been awarded to Scottish schemes. Scottish projects funded to date will produce annual savings of 1,916 tonnes of carbon.

- We have also allocated £250,000 per year to the EST **Scottish Project Fund** to support research, feasibility and pilot studies that address domestic sector energy efficiency issues important to Scotland. This is being used to fund projects addressing the technical, legal and social barriers to major improvements in energy efficiency in tenements - a major component of the Scottish housing stock.
- The Carbon Trust's **Low Carbon Innovation Programme (LCIP)**, a recently introduced programme, which is aimed at assisting the commercialisation of innovative low carbon technologies. This will contribute to reducing the carbon intensity of the economy and assist British businesses capitalise on the large predicted global demand for such products.
- The **Action Energy Programme** provided by the Carbon Trust and managed in Scotland by SEEO provides practical assistance to business and public sector organisations to assist them to reduce energy consumption. The most significant part of this programme are Site Energy Audits where businesses and the public sector can benefit from a site Energy Efficiency survey and report by a suitably qualified consultant. Recent impact analysis shows that the programme is saving an additional 25,000 tonnes of carbon each year.

Indicator 13. Energy: renewable

Percentage electricity generated from renewable sources



Percentage electricity generated from renewable sources

Year	2000	2001
Hydro	9.4%	7.6%
Wind	0.4%	0.5%
Other	0.2%	0.4%
Total renewable	10.0%	8.6%

Source: Department of Trade and Industry

The relevance of the indicator

Renewable sources of energy can provide a sustainable means of generating the energy we need. Scotland has huge potential for renewable energy. The Executive has introduced legislation that compels electricity suppliers to increase the amount of electricity that they supply by renewable means.

Detailed definition and source details

The indicator is defined as the share of total electricity generated in Scotland produced from renewable sources. The data are supplied to the Department of Trade and Industry (DTI) by the electricity generating companies including autogenerators (those companies that consume the electricity that they themselves generate). Hydro pumped storage schemes are not included as renewable sources of electricity because it is non-renewable energy that is used to pump the water. The amount of electricity generated is the total amount before taking account of any transmissions losses or own use of electricity by the electricity generators. Earlier figures used in *Meeting the Needs...* were collected by the Scottish Executive and excluded autogenerators (see Indicator 12).

Trends

The renewables share tends to fluctuate as hydro (natural flow) is highly dependent on the level of precipitation in the catchment areas.

Further disaggregation

The data source does not allow for the further disaggregation of the information held due to confidentiality constraints.

Target

An obligation on Scottish electricity suppliers to provide 10% of electricity generated from new renewable sources by 2010 is in force. It is envisaged that this will raise renewable electricity production in Scotland to around 18% (including existing large hydro resource).

We are consulting on the way forward for our renewable energy policy, and are seeking views on a generation target of 40% from renewables by 2020.

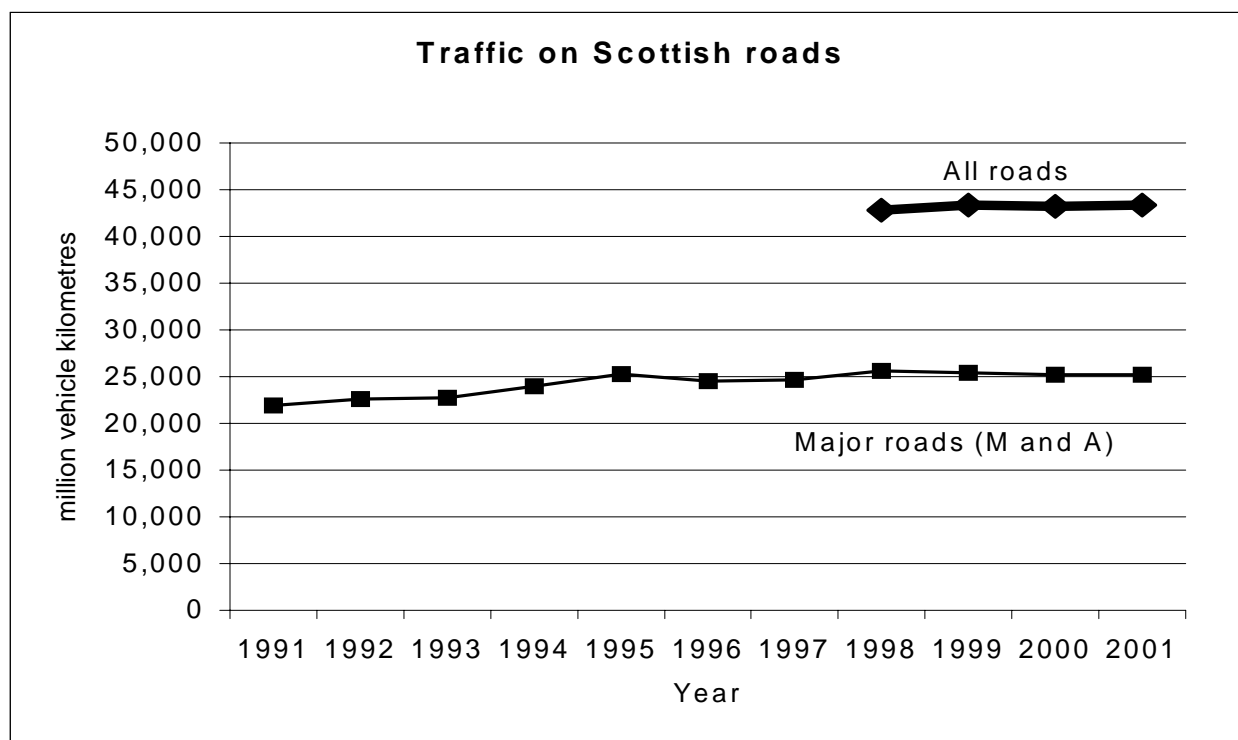
Action

The Renewables Obligation Scotland (ROS) now in force obliges licensed electricity suppliers in Scotland to source increasing amounts of their supplies from renewable sources. Suppliers will source certificates (known as ROCs) from renewable generators, which they will pass to the industry regulator to prove the extent to which they have complied with their obligation. The level of the obligation for 2002-03 is 3% of electricity supplied. We will shortly be consulting about the issues that will arise from a large increase in renewably generated electricity in Scotland.

We also fund the Scottish Community Renewables Initiative (SCRI) which is a new programme, launched in July 2002, jointly managed by Highlands and Islands Enterprise and the Energy Saving Trust (EST) to promote community-scale renewables in Scotland. Its two main objectives are to produce zero carbon electricity/energy and to familiarise the public and community organisations with renewable technologies.

Indicator 14. Travel: distance

Total vehicle kilometres



Traffic on Scottish roads: million vehicle-kilometres

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
All roads								42,775	43,338	43,208	43,382
Major roads (M and A)	21,947	22,575	22,770	23,942	25,247	24,487	24,676	25,597	25,433	25,195	25,228

Source: Department for Transport

Note: These figures will be revised once the Department for Transport has improved its method of estimating the volume of road traffic.

The relevance of the indicator

Road traffic is forecast to rise by 27% by 2021¹. This increase is unsustainable. People should have much greater access to services and goods without needing to travel. Sustainable communities are ones which are planned with travel minimisation as a goal.

Detailed definition and source details

The indicator is defined as the estimated total volume of traffic on Scotland's roads, in millions of vehicle-kilometres, as estimated by the Department for Transport. The data are published annually in Table 6.1 of *Scottish Transport Statistics*². At present, there are no reliable estimates of the total volume of traffic on all roads for the years prior to 1998.

¹ The figure of 27% comes from the *Review of Local Transport Strategies and RTRA Reports* prepared by Steer Davies Gleave in October 2001.

² Available on the Scottish Executive website at: www.scotland.gov.uk/stats/bulletins/103/00103-49.asp

Therefore, the chart also shows the estimated volume of traffic on major roads (Motorways and A roads), estimates of which are available for earlier years. These figures will be revised once the Department for Transport has improved its method of estimating the volume of road traffic.

Trends

There has been little change in the estimated volume of traffic on all roads since 1998 (the only years for which estimates are available), or in the estimated volume of traffic on major roads since 1995. However, there was considerable growth in the volume of traffic on major roads in the years up to 1995. The apparent fall between 1995 and 1996 is thought to be due to the effect of local government reorganisation on the method of estimating traffic volumes³.

Further disaggregation

The present Department for Transport estimates can be disaggregated by road class, speed limit, vehicle type and, for major roads, by local authority. However, they do not provide separate figures for traffic in "rural" and "urban" areas³. Estimates of the volume of traffic on major roads in Scotland are available for each year back to the mid-1980s.

Target

To stabilise road traffic at 2001 levels by 2021.

Action

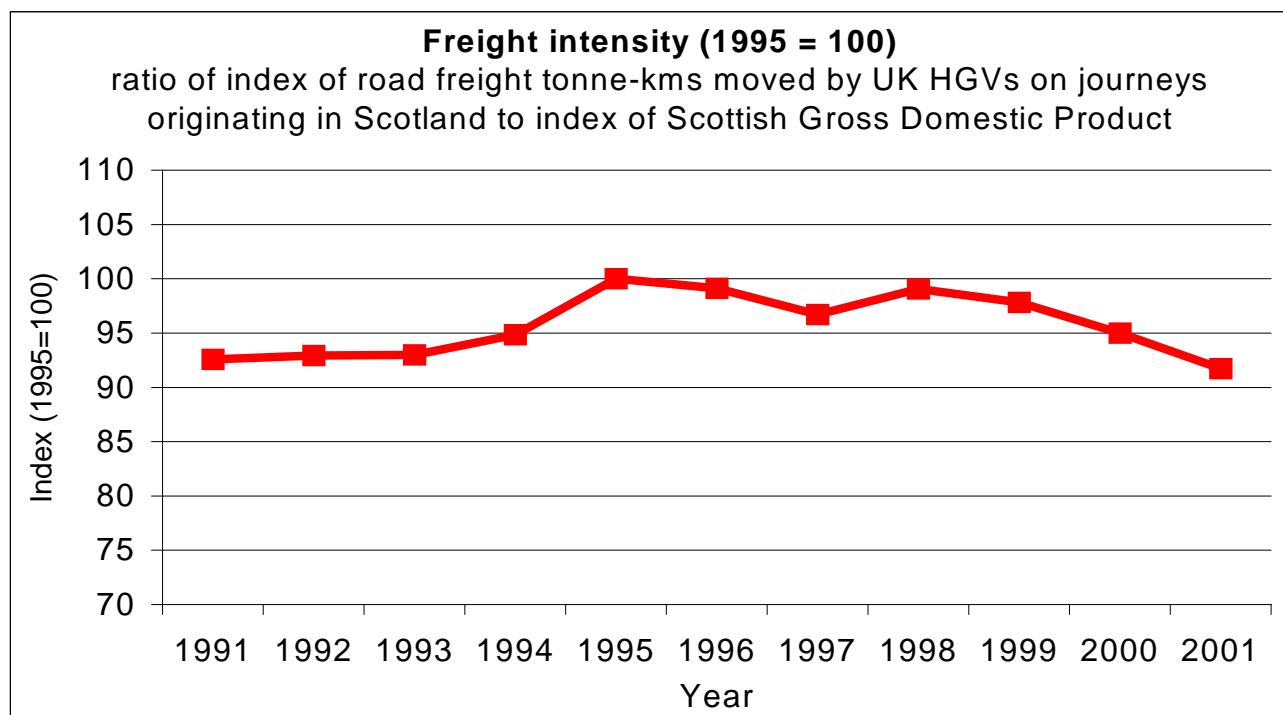
Our overriding goal⁴ is to tackle the challenge of urban and inter-urban congestion and to stabilise road traffic at 2001 levels by 2021. We will do this through investing in an integrated package of measures – modernising and improving public transport, promoting alternative modes of transport to the private car, and targeted motorway and trunk road improvements. We will also undertake a comprehensive review of the road traffic reduction targets set by the 4 main Scottish cities (Aberdeen, Dundee, Edinburgh and Glasgow) and their neighbouring authorities, which will include the identification of a range of measures necessary to deliver these by 2021. We are focusing on the 4 main metropolitan areas because 80% of the predicted increase in road traffic is in these areas.

³ More information can be found in Chapter 6 of *Scottish Transport Statistics*.

⁴ Outlined in *Scotland's Transport: Delivering Improvements* (Scottish Executive, March 2002)

Indicator 15. Travel: industry

Freight intensity (relationship between tonne kilometres moved and Gross Domestic Product)



Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Road freight moved by UK HGVs on journeys originating in Scotland (million tonne kilometres)	11,909	12,121	12,426	12,995	13,965	14,163	14,236	14,856	14,988	14,817	14,425
Road freight moved by UK HGVs on journeys originating in Scotland (1995=100)	85.3	86.8	89.0	93.1	100.0	101.4	101.9	106.4	107.3	106.1	103.3
Scottish GDP (Gross Value Added for all industries; 1995 = 100)	92.1	93.4	95.7	98.1	100.0	102.3	105.4	107.4	109.7	111.7	112.6
Freight intensity (1995 = 100)	92.6	92.9	93.0	94.9	100.0	99.1	96.7	99.1	97.8	95.0	91.7

Source: Department for Transport and Scottish Executive

The relevance of the indicator

Encouraging more freight to be lifted by other modes will help to reduce traffic on our roads.

Detailed definition and source details

The indicator is derived from figures for the total "volume" (in tonne kilometres) of road freight moved by UK heavy goods vehicles on journeys originating in Scotland. These figures, produced by the Department for Transport and published annually in *Scottish*

*Transport Statistics*¹ (Table 3.3), are used to produce an index. The value for each year in this index is multiplied by 100 and divided by that year's value of the index of Scottish Gross Domestic Product, in order to obtain the "freight intensity" index shown in the chart. The GDP index used in these calculations is an updated version of the "Gross Value Added" series for all industries². Tonne kilometre figures for road freight moved by UK HGVs on journeys originating in Scotland have been obtained from the Department for Transport for the years back to 1990.

Trends

The "freight intensity" index indicates how the "volume" of road freight (measured in tonne-kilometres) has been changing relative to the "volume" of the Scottish economy as a whole. For example, the value of the freight intensity index will rise if the volume of road freight increases more rapidly than the rate at which the Scottish economy grows, or if the volume of road freight rises while the Scottish economy contracts, or if the volume of road freight falls less rapidly than the Scottish economy contracts. The index rose in the early 1990s, fluctuated between 1995 and 1998, and has been falling since then. Therefore, since 1998, the volume of road freight moved on journeys originating in Scotland has declined relative to the expansion of the Scottish economy.

Further disaggregation

The Department for Transport estimates are produced from sample surveys which collect details of the journeys made by only 50 or so different Scottish heavy goods vehicles each week. Therefore, it is not possible to disaggregate them other than by types of commodity carried and, very broadly, by origins and destinations of journeys (in terms of regions and countries). It is not possible to provide separate estimates for "urban" and "rural" areas³.

Target

To make Freight Facility Grant Scheme awards that will transfer 21 million lorry miles per year on to rail and water by March 2003 and a further 4 million lorry miles per year by March 2006. This builds on the 18 million lorry miles per year achieved by March 2002.

Action

We actively encourage sustainable freight transport by rail and water. The Freight Facilities Grant Scheme is designed to reduce road traffic congestion and pollution arising from transporting freight by road, which is clearly the main means of transporting goods in Scotland, by addressing the commercial imbalances which exist by assisting with initial capital costs. We have achieved our March 2002 target of making awards that will transfer 18 million lorry miles per year off our roads on to rail and water, and we are on target to transfer a further 3 million lorry miles per year by March 2003.

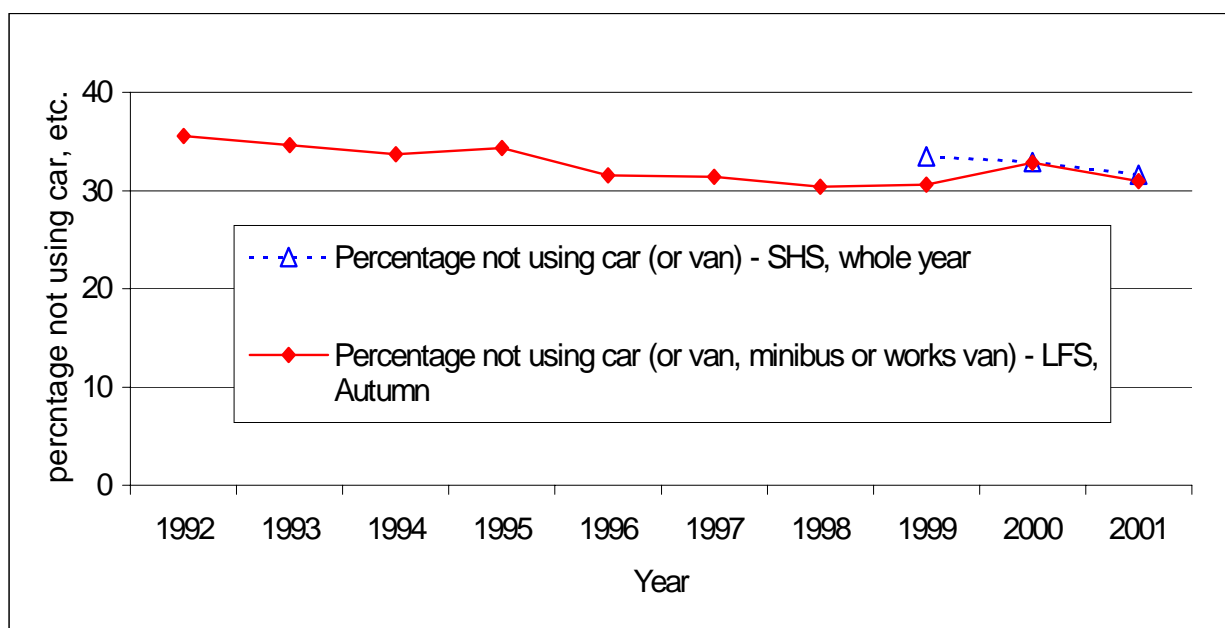
¹ Available on the Scottish Executive website at: www.scotland.gov.uk/stats/bulletins/103/00103-49.asp

² Table 1.2 of *Scottish Economic Statistics* which is available on the Scottish Executive website at: www.scotland.gov.uk

³ More detailed figures are published annually in Chapter 3 of *Scottish Transport Statistics*.

Indicator 16. Travel: mode

Percentage of journeys to work not using car



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Percentage not using car (or van, minibus or works van) - LFS, Autumn	36	35	34	34	32	31	30	31	33	31
Percentage not using car (or van) - SHS, whole year								33	33	32

Source: Scottish Executive, Labour Force Survey (LFS); Office for National Statistics: Scottish Household Survey (SHS)

The relevance of the indicator

Cars do not use resources as efficiently as other forms of transport. Encouraging people to travel to work without using their car is a good way of using resources better, as well as cutting pollution, greenhouse gas emissions and congestion on our roads.

Detailed definition and source details

The indicator is defined as the percentage of adults, whose current situation is best described as self-employed, employed full or part-time, and who do not work from home, that do not use a car (or van) to travel to work. The data are from annual results of the Scottish Household Survey (SHS), which is commissioned by the Scottish Executive and has been running since 1999¹. This survey covers private households and adults in private residence. It has a large sample, so can provide statistics for different types of area within Scotland.

¹ Detailed results are published annually in Chapter 12 of *Scottish Transport Statistics*, and in the annual *Household Transport...*, and biennial *Transport across Scotland ...*, statistical bulletins of Transport-related results from the SHS which are available on the Scottish Executive website at: www.scotland.gov.uk

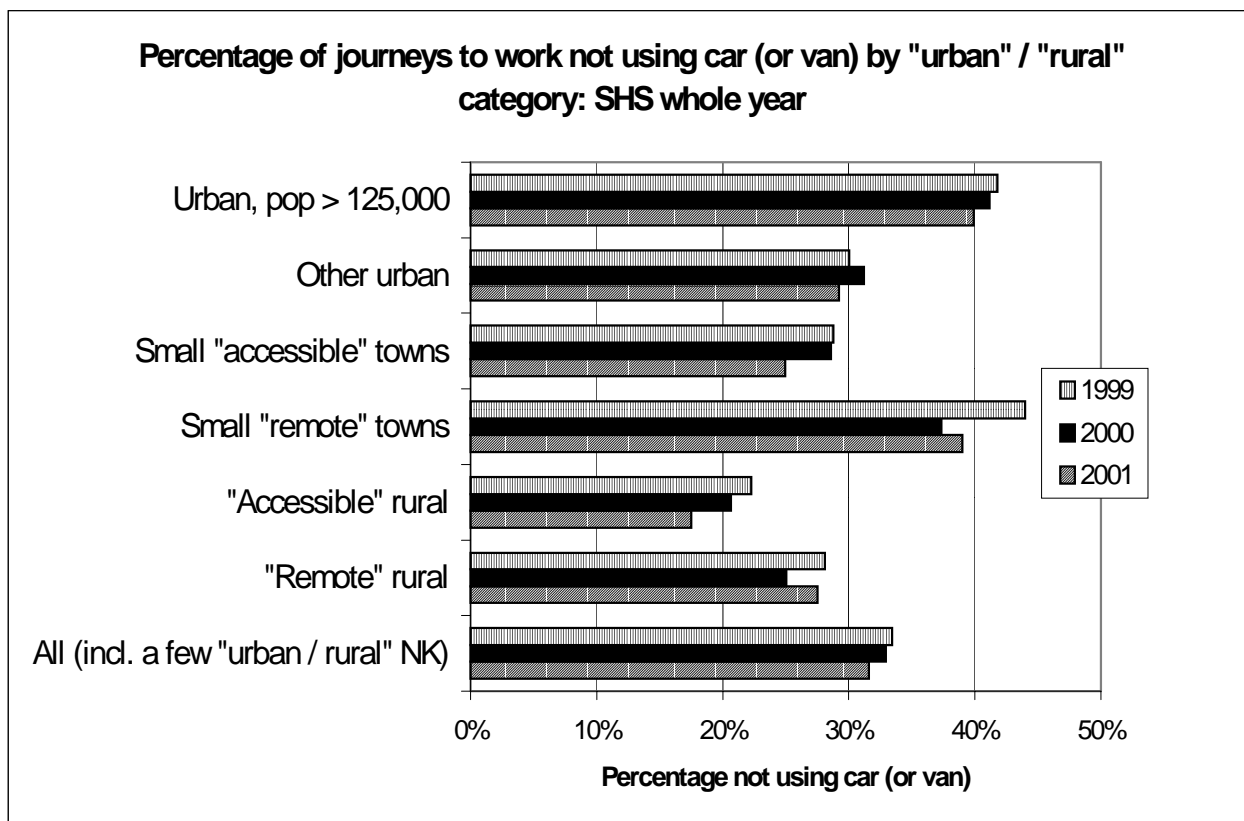
Similar results for Scotland as a whole can be obtained from the Labour Force Survey (LFS) for 1992 onwards, and for some earlier years from the Censuses of Population².

Trends

The SHS figures suggest a slight fall in the percentage of journeys to work that are not by car (or van) between 1999 and 2001. The results of the Labour Force Survey and the Census show larger falls over the longer term.

Further disaggregation

The SHS results can be disaggregated in many ways, including by age, gender, social class, household income band, distance between home and work, local authority and "urban" and "rural" areas². Irrespective of the whether the area is urban or rural, less than half of workers usually travel to work other than by car (or van). About 40% of those living in large towns and small remote towns use modes other than a car (or van) for journeys to and from work. This compares with about 20% for those living in "accessible" rural areas. (See the Annex for details of the SHS "urban" and "rural" categories used below)



Source: Scottish Executive

² Published in chapter 12 of *Scottish Transport Statistics*.

Percentage of journeys to work not using car (or van) by "urban" / "rural" category, SHS whole year

Urban/Rural area	1999	2000	2001
Urban, pop > 125,000	42	41	40
Other urban, pop > 10,000 - 125,000	30	31	29
Small "accessible" towns > 3,000 - 10,000	29	29	25
Small "remote" towns > 3,000 - 10,000	44	37	39
"Accessible" rural	22	21	18
"Remote" rural	28	25	28
All (including a few "urban / rural" NK)	33	33	32

Source: Scottish Executive

Target

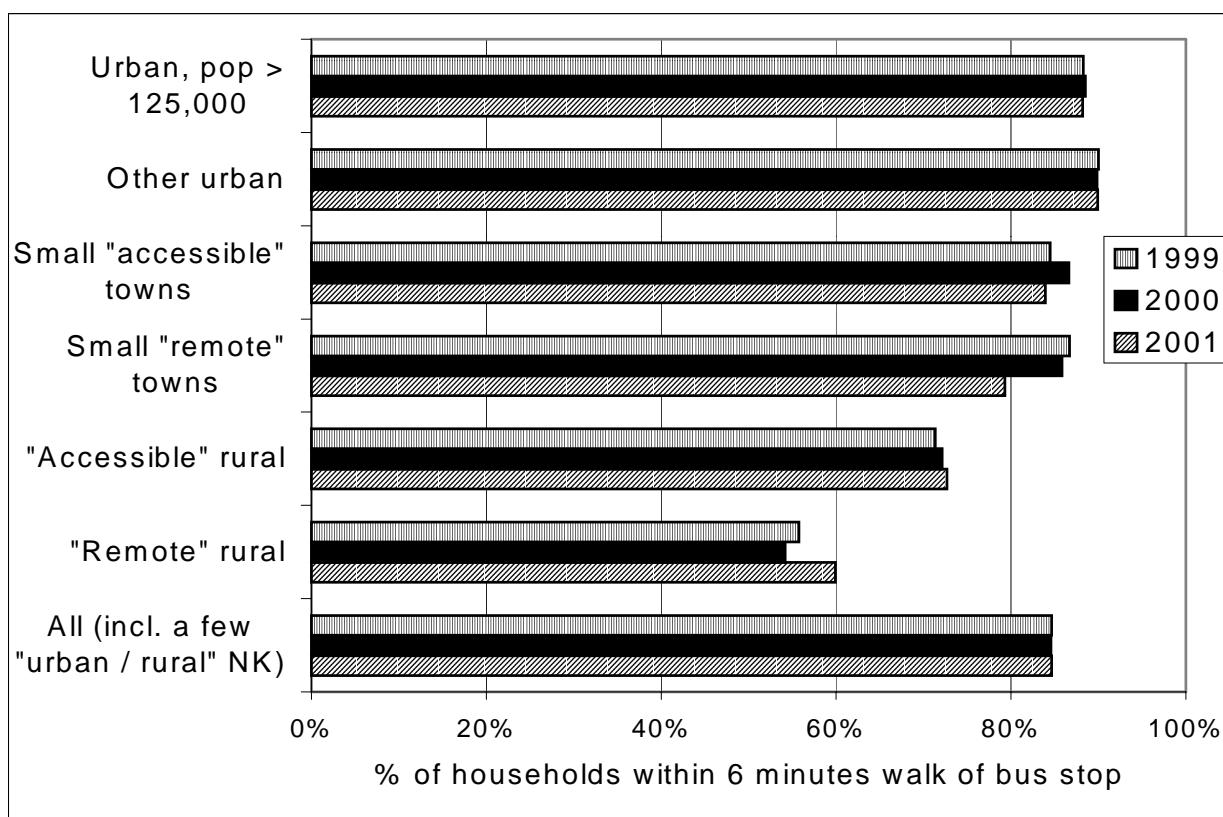
To increase the proportion of non-car travel to work by 2006.

Action

Key in tackling rising road traffic levels and congestion is encouraging modal shift away from the private car to public transport, and to walking and cycling for shorter trips. The journey to work is one of the types of journeys that generate considerable discretionary travel by private car. The transport corridor studies recently undertaken on the A8, A80 and M74 illustrate the traffic and congestion problems on these 3 corridors. People are commuting over long distances, with over 60% of peak traffic made up of car commuters and over 86% of the cars on the A8 and A80 at peak times are occupied by one person. In order to reduce traffic and congestion more people need to use public transport. Public transport must be capable of catering effectively for the journeys being made, be reliable, modern and accessible. We are therefore committed to delivering top priority public transport projects flowing from the corridor studies and to providing support for additional park and ride capacity across Scotland.

Indicator 17. Travel: accessibility

Percentage of Scottish households within 6 minutes walk of a bus service



Urban/Rural area	1999	2000	2001
Urban, pop > 125,000	88%	88%	88%
Other urban, pop > 10,000 - 125,000	90%	90%	90%
Small "accessible" towns > 3,000 - 10,000	85%	87%	84%
Small "remote" towns > 3,000 - 10,000	87%	86%	79%
"Accessible" rural	71%	72%	73%
"Remote" rural	56%	54%	60%
All (including a few "urban / rural" NK)	84.7%	84.6%	84.7%

Source: Scottish Executive

The relevance of the indicator

Accessibility to transport is a key issue for sustainable development and social justice. We need to ensure that more Scottish households are able to choose sustainable forms of transport.

Detailed definition and source details

The indicator is defined as the percentage of Scottish households within a 6 minute walk of a bus service. The data are from annual results of the Scottish Household Survey (SHS) which is commissioned by the Scottish Executive and has been running since 1999. Householders are asked how long it would take the interviewer to walk to the nearest bus stop (or place

where one could get on a bus). Results are published annually in *Bus and Coach Statistics*, and in the annual *Household Transport...* and biennial *Transport across Scotland...* statistical bulletins of transport-related results from the SHS¹. While, in theory, results on a slightly different basis might be available for some earlier years from the National Travel Survey, in practice its clustered design and the small size of its sample in Scotland mean that they have not been used.

Trends

The SHS figures suggest minimal change between 1999 and 2001.

Further disaggregation

The SHS results can be disaggregated in many ways, including by household type, social class, household income band, property type, tenure, local authority and "urban" and "rural" areas (details of the SHS "urban" and "rural" categories are given in the Annex).

With the exception of those living in "accessible" and "remote" rural areas, broadly speaking, around 85-90% of Scottish households live within 6 minutes walk of a bus stop. This falls to just over 70% in "accessible" rural areas and 55-60% in "remote" rural areas. The percentages for some of the types of area can fluctuate noticeably from year to year, due to sampling variability and to population changes causing some settlements to be counted in a different category of the "urban / rural" classification in the next year.

Target

To increase local bus passenger journeys by 5% by 2006, compared with 2000-01 levels.

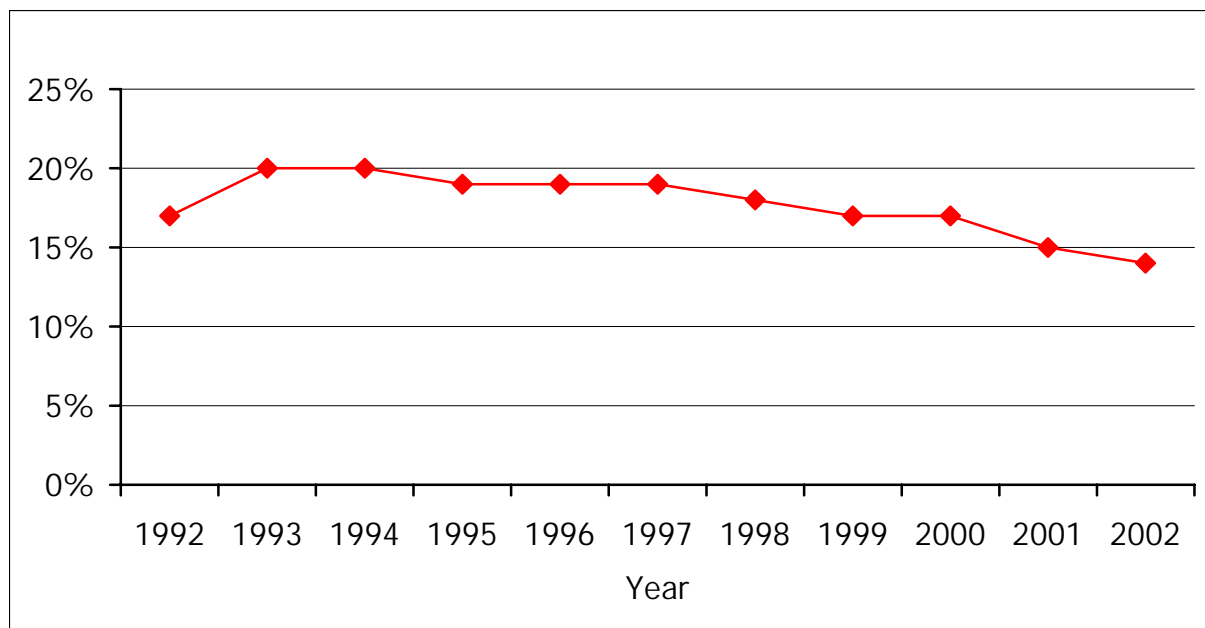
Action

Local buses are the most frequently used and the most accessible mode of public transport across Scotland. As might be expected, in rural areas a higher proportion of the population live further away from bus stops than in urban areas, and in some of Scotland's most remote areas no services are available. We are committed to improving local bus services across Scotland through the Public and Integrated Transport Funds, as an alternative to the private car for journeys into town and in-town, and to promote social inclusion, by providing access to jobs and services for those who do not have access to a car. In rural areas, public transport provision is also supported through the Rural Transport Fund. This fund provides support for local bus services, which may otherwise not be economically viable and for demand responsive and community transport initiatives, tailored to meet the transport needs of local communities.

¹ These publications are available on the Scottish Executive website at: www.scotland.gov.uk

Indicator 18. Home Life

Percentage of children living in workless households (Social Justice Milestone 1)



Percentage of children living in workless households

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	17	20	20	19	19	19	18	17	17	15	14

Source: Labour Force Survey: Office for National Statistics

The relevance of the indicator

Making the most of our greatest resource - our people - means giving every child the best possible start in life. Poverty of income and of opportunity in childhood are more likely to lead to poverty of experience as a young person and adult.

Detailed definition and source details

The indicator is defined as the proportion of dependent children aged under 19 years who are in households where no one is in work. The definition 'dependent' means children aged 0 - 15 and those aged 16 - 18 who are in full time education. The data are taken from the spring quarter of the Labour Force Survey which is run by the Office for National Statistics.

Trends

Between 1993 and 1996 there was little movement in this indicator. Since 1997, which is the baseline figure for our complementary measurements of children in low-income households¹, the proportion of children in workless households has fallen steadily. The figure for 2001

¹ *Social Justice - a Scotland where everyone matters, Annual Report 2002*, available on the Scottish Executive website at: www.scotland.gov.uk/socialjustice/publications/index.htm

shows that 15% of all dependent children live in workless households. This is 4 percentage points lower than the figure in 1997.

Further disaggregation

The Labour Force Survey is designed to provide national level information. The current sample size of the survey does not allow for the further disaggregation of the information held on children living in workless households.

Target

There is no target, but there is a social justice milestone to reduce the proportion of children living in workless households. Reducing the proportion of children living in workless households is an important indicator of our progress on eliminating child poverty on the basis that work is the best route out of poverty.

Action

Over the past four years, in partnership with the UK government, we have taken action to raise the incomes of families, especially for those on the lowest incomes. To help children out of poverty we have provided more support than ever before to enable parents to work, and to ensure that they are better off in work. We have set the long term objective, in partnership with the UK government, of ending child poverty within a generation. Since then, we have made significant progress towards that aim, improving the lives, prospects, and opportunities of children and young people.

Progress to reduce the proportion of children in workless households is underpinned by the policies of the UK government, particularly in relation to the New Deal programmes and the modernisation of the tax and benefit system to make work pay.

The New Deal programmes, delivered in partnership with the UK Government, have been effective in moving people from welfare into work in Scotland. For example, 47,000 young people (18-24), 13,700 adults (25 years plus) and 17,200 lone parents have so far gone into jobs. The New Deal for Lone Parents is now one of the priority areas for action, due to the high levels of workless households with children headed by a lone parent.

The transition into work from benefits can be a difficult one for many parents, particularly lone parents. In order to make work pay, the UK Government put in place a range of tax credits since October 1999. The Working Families Tax Credit (WFTC) is now supporting approximately 127,000 families in Scotland. Childcare costs can be a barrier to parents entering employment. In recognition of this, childcare costs are also supported through the childcare tax credit component of both WFTC and Disabled Person's Tax Credit. The childcare tax credit supports up to 70% of eligible childcare costs up to a maximum of £135 per week for the first child, and £200 per week for parents with 2 or more children.

The supply of childcare is essential to making inroads into reducing the proportion of children in workless households. Childcare places are being expanded through Childcare Strategy funding and New Opportunities Fund programmes, targeting disadvantaged areas and fragile provision. We are looking at the current sitter services network, where childcare

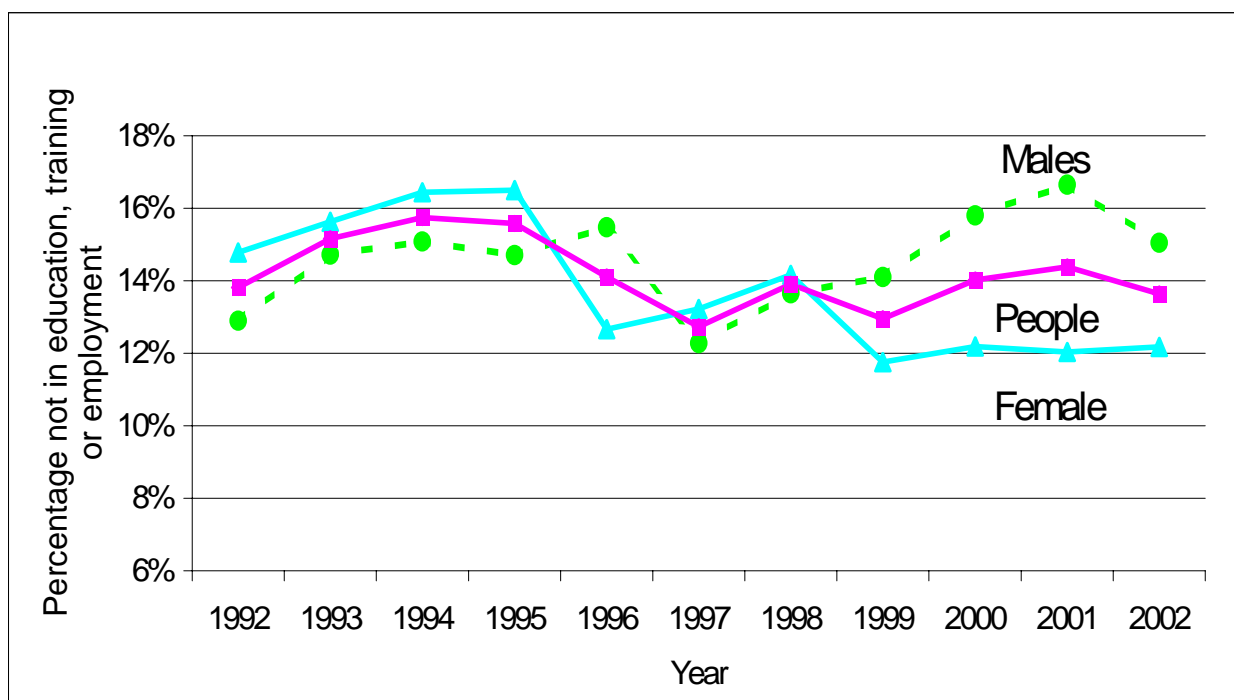
is provided in the parents home to support unusual working patterns for low income families, as a possible means of extending the eligibility to Childcare Tax Credit in Scotland.

The route into work can also mean participating in further and higher education courses. In recognising the particular barriers for lone parents to enter education, we are supporting some of the childcare costs for lone parents. In 2001, a further £24m 3-year package was introduced to support lone parents in college. This includes a £1000 childcare grant for lone parents taking higher education courses, and £7.5m to Further Education Colleges to widen childcare provision.

But poverty is not just about income – it is also about the crucial early years, and through Sure Start Scotland assistance is being provided to strengthen families and make a difference to children’s health, education and well-being, through early intervention. Our programme for government target has been reached and exceeded. Our commitment to delivering services to children, families and communities is working towards breaking the cycles of economic and social exclusion for our children.

Indicator 19. Preparing for Life

Percentage of 16-19 year olds who are not in education, training or employment (Social Justice Milestone 7)



Percentage of 16-19 year olds who are not in education, training or employment

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Males	13	15	15	15	15	12	14	14	16	17	15
Females	15	16	16	16	13	13	14	12	12	12	12
People	14	15	16	16	14	13	14	13	14	14	14

Source: Labour Force Survey: Office for National Statistics

The relevance of the indicator

Education and training are central to enabling every child to reach their full potential. We want to see a Scotland in which every young person has the opportunities, skills and support to make a successful transition to working life and active citizenship.

Detailed definition and source details

The indicator is defined as the proportion of 16-19 year olds who are not classed as a student, or in employment (including government training). The information is taken for each year from the spring quarter of the Labour Force Survey which is run by the Office for National Statistics¹.

¹ These data are published annually in *Social Justice - A Scotland where everyone matters, Annual Reports*, available on the Scottish Executive website at: www.scotland.gov.uk/socialjustice/publications/index.htm

Trends

Data for 2002 estimates that 14% of 16 – 19 year olds are not in education, training or employment. This is the same level that was estimated for the year 2001. Since 1992, the figure has remained relatively stable between 13% and 16%.

Further disaggregation

In recent years a higher percentage of males aged 16-19 years were not in education, training or employment compared to females of the same age group. The gap between genders has recorded a small decrease in 2002 compared with 2001.

Target

The target is to reduce the proportion of 16-19 year olds who are not in education, training or employment by 2006². In 1999 just over 33,000 people in Scotland aged 16-19 were not in work, education or training.

Action

We are taking action on a number of fronts to influence the indicator:

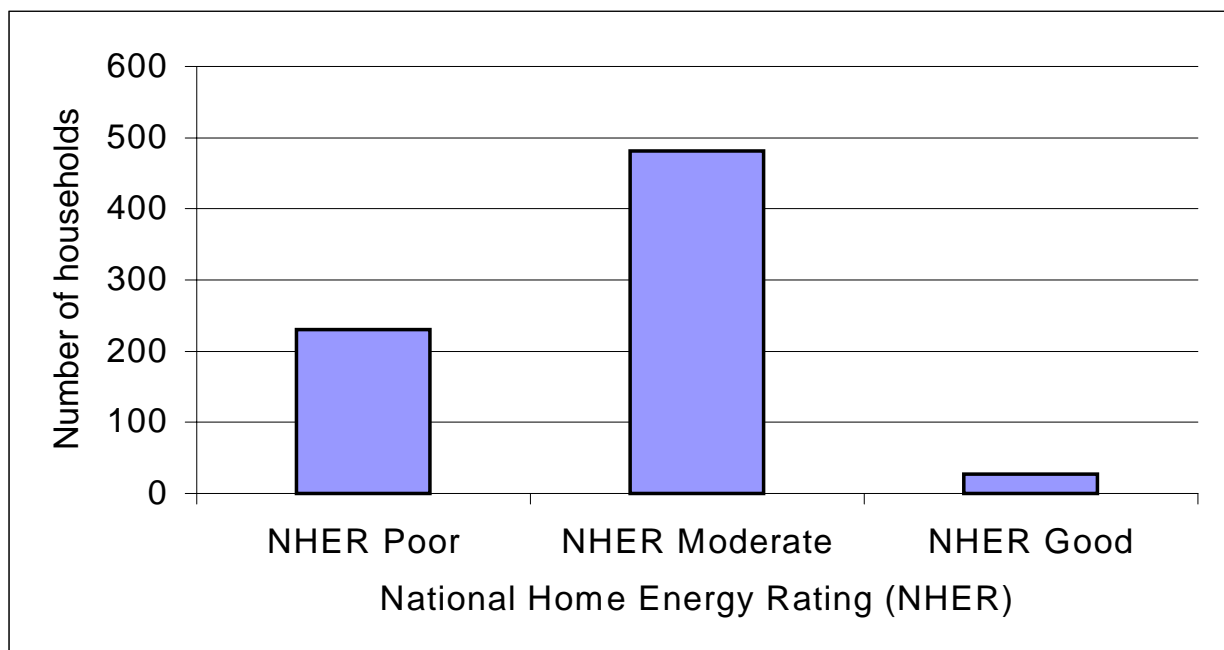
- Enrolments in further education colleges in 2000-01 increased by 12% over the previous year. A total of over 65,000 new further education places have been created since 1998-99. 24% of students enrolled in colleges in 2000-01 are from areas defined as high deprivation. The target for 2002-03 is to increase students from disadvantaged groups by 3%;
- Youth unemployment has fallen by three quarters since 1997. 47,000 young people have got jobs through New Deal for young people (18-24 years) since the scheme began - 76% of which were sustained;
- 4 strategic targets have been agreed for Careers Scotland³, within the context of *Smart, Successful Scotland* and the National Priorities for Education. Of particular significance is the target to reduce by 6,000 (by the end of academic year 2004/5) the number of young people (16-19 years) for whom being NEET (not in education, employment or training) is a negative experience;
- The multi-agency Beattie Inclusiveness Projects, now managed by Careers Scotland, have a major role here. Through a new network of key workers, they have already given individual support to over 8,000 vulnerable young people.

² This target has been refined since the publication of *Meeting the Needs...* in light of the Spending Review 2002. The Scottish Executive has set high level targets designed to measure the impact of policy over the spending review period i.e. to 2005/06. The Executive's approach is to set more specific targets for its delivery agents.

³ More information on Careers Scotland can be found at: www.careers-scotland.org.uk

Indicator 20. Fuel Poverty

Total number of households living in fuel poverty



Households living in fuel poverty in 1996 by National Home Energy Rating (NHER)

	NHER Poor	NHER Moderate	NHER Good	Total
Number of households ('000s)	230	481	27	738

Source: 1996 Scottish House Condition Survey

Notes: NHER is based on the total energy costs per square metre of floor area required to achieve a standard heating regime. The NHER of a property is assessed on a scale of 0-10 with ranges of: poor 0-2, moderate 3-7 and good 8-10.

The relevance of the indicator

Sustainable communities are those where people can afford to keep adequately warm at a reasonable cost. We are committed to tackling the energy inefficiency which causes fuel poverty.

Choice of indicator

This is the indicator used in the *Scottish Fuel Poverty Statement*¹ published under the terms of the Housing (Scotland) Act 2001 in August 2002 and the UK Fuel Poverty Statement published in November 2001.

¹ Available on the Scottish Executive website at: www.scotland.gov.uk/library5/environment/sfps-00.asp

Detailed definition and source details

The definition that we have adopted for the purpose of the commitment to end fuel poverty by 2016 is:

A household is in fuel poverty if, in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income (including Housing Benefit or Income Support for Mortgage Interest) on all household fuel use.

We will also monitor changes in the numbers of people in fuel poverty using a definition of household income which excludes Housing Benefit and Income Support for Mortgage Interest.

Within the definition the following explanations apply:

Satisfactory heating regime – the levels are those recommended by the World Health Organisation. For elderly and infirm households, this is 23°C in the living room and 18°C in other rooms, to be achieved for 16 hours in every 24. For other households, this is 21°C in the living room and 18°C in other rooms for a period of 9 hours in every 24 (or 16 in 24 over the weekend); with two hours being in the morning and seven hours in the evening.

Household income – income before housing costs, to mirror the definition used in the UK Households Below Average Income (HBAI) Statistics.

Further information on the definition is included in the *Scottish Fuel Poverty Statement*. The only available data are those collected in the 1996 Scottish House Condition Survey.

Trends

In 1996, there were 738,000 households in fuel poverty in Scotland. Since 1996, there have been a number of developments at both UK and Scottish level which are likely to have had an impact on the overall number of households in fuel poverty in Scotland. Once the results of the 2002 Scottish House Condition Survey become available in late 2003, it will be possible to quantify the impact that these measures have had. The *Scottish Fuel Poverty Statement* sets out the various changes and measures which are likely to have resulted in a reduction in the number of households in Fuel Poverty.

Further disaggregation

Further disaggregation of the 1996 data from the Scottish House Condition Survey is available in the *Scottish Fuel Poverty Statement*, including by household type, by tenure, by the energy efficiency of the housing stock and by income.

Target

To end fuel poverty in Scotland by 2016.

Action

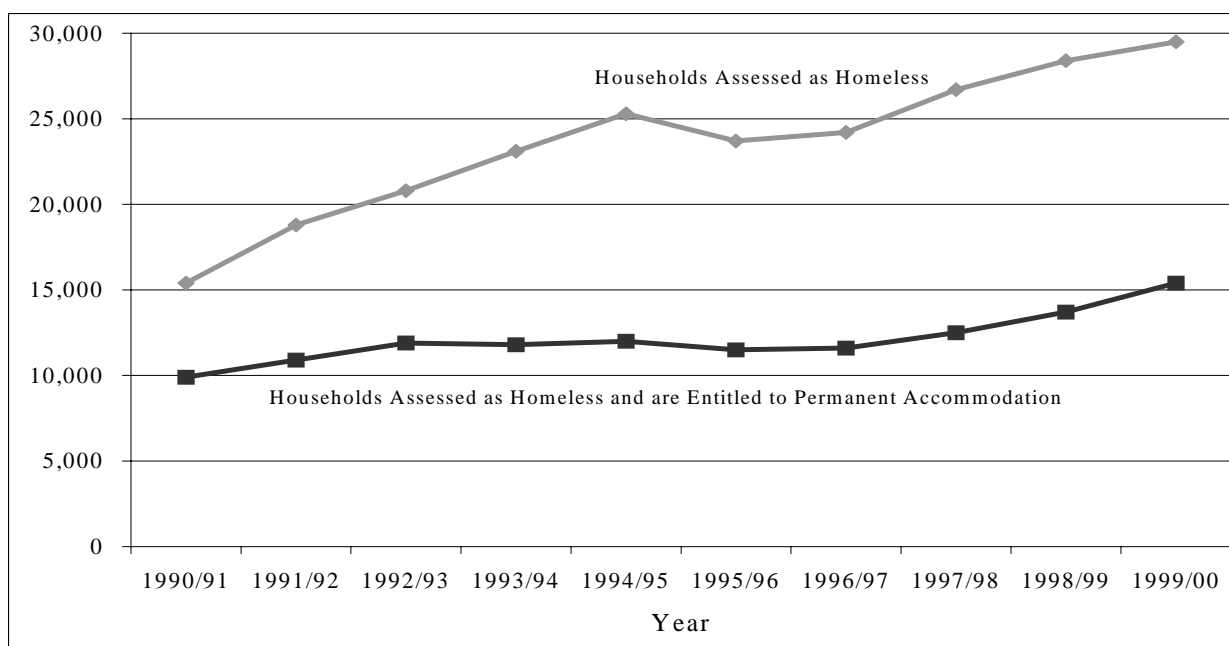
We are working with local authorities, the energy companies and voluntary organisations to tackle fuel poverty through a range of activities, including:

- developing knowledge about the nature and extent of fuel poverty and the impact of particular interventions;
- working with statutory, voluntary and private sector organisations to raise awareness of fuel poverty and the ways in which it can be addressed;
- investing in housing improvement measures through Scottish Executive programmes such as the Central Heating Programme, the Warm Deal and community ownership and through work with the energy companies and local authorities through the Energy Efficiency Commitment and Community Energy Partnerships;
- improving energy efficiency measures in new housing stock through the building regulations and through the development and promotion of new technology;
- developing partnership working and local co-ordination to ensure that programmes are delivered effectively to those who can benefit from them and the maximum value is obtained from the overall investment.

More is said about our forward work programme in the *Scottish Fuel Poverty Statement* and the Fuel Poverty Advisory Group, which includes the main organisations with an interest in fuel poverty, will work with us to develop and implement the work programme.

Indicator 21: Social Concern

Number of homeless people entitled to permanent accommodation



Year	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Households Assessed as Homeless	15,400	18,800	20,800	23,100	25,300	23,700	24,200	26,700	28,400	29,500*
Households Assessed as Homeless and are Entitled to Permanent Accommodation	9,900	10,900	11,900	11,800	12,000	11,500	11,600	12,500	13,700	15,400*

Source: Scottish Executive Housing Statistics Branch, taken from HSG/2002/1 Housing Trends Bulletin 2002.

Notes: The figures given are estimates based on information from the authorities' individual case returns. Local authorities generally provide case returns for around 92% of the applications they receive. The information from the case returns is grossed up to the total number of applications as recorded on the authorities' quarterly summary returns. Since the resulting figures are estimates the numbers are rounded to the nearest hundred.

The number of applications figures quoted will include households which have applied more than once to the authority under the homeless persons legislation. Accurate information on the number of applications from households which have applied previously is not yet available.

* The figures quoted in Indicator 21 of *Meeting the Needs...* included all those assessed as homeless or potentially homeless and in priority need. It should however have been limited to those assessed as unintentionally homeless and in priority need. Those who are potentially homeless do not have a duty of permanent accommodation owed to them unless and until they become homeless, and those who are intentionally homeless currently have limited entitlement to temporary accommodation. The correct figure representing the number of households assessed as homeless is 29,500, of which the number with a duty of permanent accommodation owed to them is 15,400.

The relevance of the indicator

Part of sustainable development is having regard for others who do not have access to the same level of resources. We are committed to tackling homelessness.

Choice of indicator

The figures shown relate to the number of homeless households entitled to permanent accommodation, rather than homeless people.

Detailed definition and source details

The Housing (Homeless Persons) Act 1977, now consolidated into Part II of the *Housing (Scotland) Act 1987* as amended by the *Housing (Scotland) Act 2001*, introduced statutory duties on housing authorities to assist those who are homeless or potentially homeless (i.e. threatened with homelessness), including providing accommodation in certain circumstances. Only unintentionally homeless households that are in 'priority need'¹ are entitled to permanent accommodation.

The legislation requires local authorities to make inquiries into the circumstances of applicants in order to satisfy themselves whether the applicant is homeless or potentially homeless. Section 24 of the *Housing (Scotland) Act 1987* defines homelessness for the purposes of the Act as follows: A person is homeless if he/she has no accommodation in the United Kingdom or elsewhere. A person is also homeless if he/she has accommodation but cannot occupy it, for example because of a threat of violence. A person is potentially homeless (i.e. threatened with homelessness) if it is likely that he/she will become homeless within 2 months.

Trends

The number of households assessed as homeless (excluding potentially homeless) have risen by 92% between 1990/91 and 1999/00 (from 15,400 to 29,500). The percentage of these households that are assessed as being unintentionally homeless and in priority need (and therefore entitled to permanent accommodation to be found by the Local Authority), has fallen from 64% in 1990/91 to 52% in 1999/00.

Further disaggregation

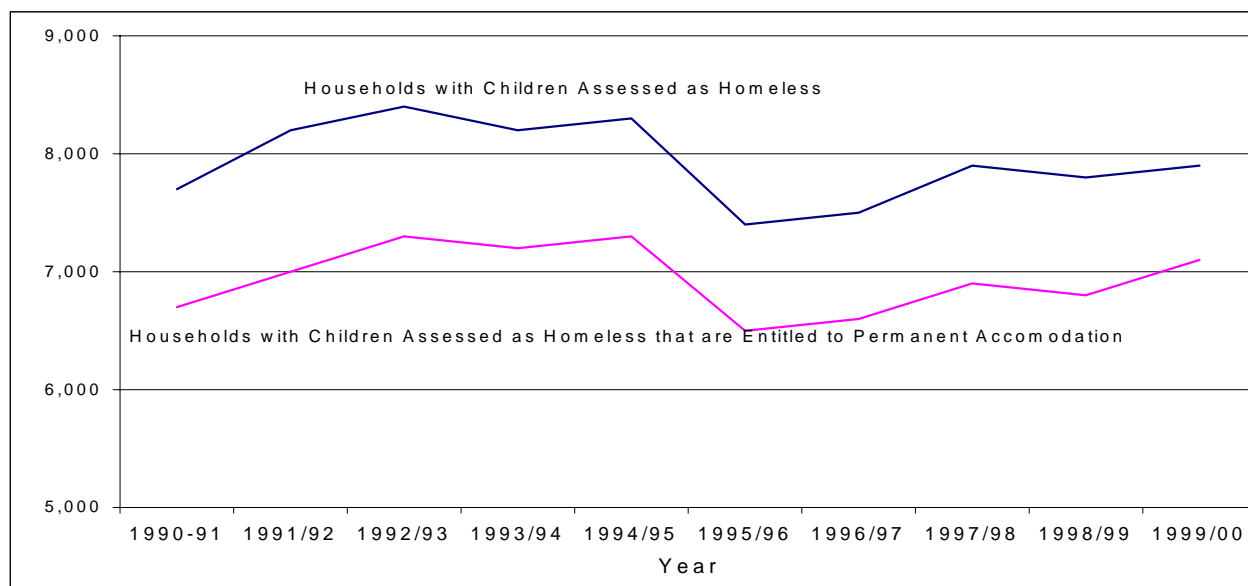
Full Local Authority breakdowns by assessment decision and action for 1999/00 can be found in the Homelessness *Statistical Bulletin* (HSG/2001/5) published in November 2001².

The chart and table on the preceding page show the number of households with dependent children who are assessed as homeless and the number of such households who are entitled to

¹ A household is regarded as having a priority need for accommodation if: a) it contains dependent children, b) a member of the household is pregnant, c) a member of the household is vulnerable because of: old age, physical disability, mental illness or handicap, or other special reasons (as set out in the Code of Guidance on Homelessness), d) a young person under 21 is looked after by a local authority at school leaving age or later (formerly "in care"), e) the household is homeless in an emergency (e.g. because of fire or flood) (Housing (Scotland) Act 1987, Section 25).

² Available on the Scottish Executive website at: www.scotland.gov.uk/stats/bulletins/00127-00.asp

permanent accommodation - the difference being mainly homeless households with dependent children deemed to be intentionally homeless. In each year since 1990/91, over 85% of households with dependent children who are assessed to be homeless have been entitled to permanent accommodation rising to 90% in 1991/00.



	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Households with Children assessed as Homeless	7,700	8,200	8,400	8,200	8,300	7,400	7,500	7,900	7,800	7,900
Households with Children assessed as Homeless that are entitled to Permanent Accommodation	6,700	7,000	7,300	7,200	7,300	6,500	6,600	6,900	6,800	7,100
Proportion of Homeless Households with Children that are entitled to Permanent Accommodation	87%	85%	87%	88%	88%	88%	88%	87%	87%	90%

Source: Scottish Executive Housing Statistics Branch

Target

By 2012, local authorities will be required to find permanent accommodation for all households assessed as being homeless. This will be achieved in stages through the gradual expansion of the definition of priority need to the extent that, by the target date, the definition embraces everyone who is assessed as homeless. Where the right to permanent accommodation has been suspended because of a finding of intentionality, as a consequence of legislation introduced in 2002, the local authority will still have a duty to provide accommodation. The definition of priority need will be expanded progressively as increased services and accommodation are provided. The precise timing of the progressive expansion will be decided in the light of progress, made on an assessment of local authorities'

homelessness strategies and local housing strategies. The Homelessness Monitoring Group will advise Ministers on the timetable for expansion within the target of full expansion by 2012.

Action

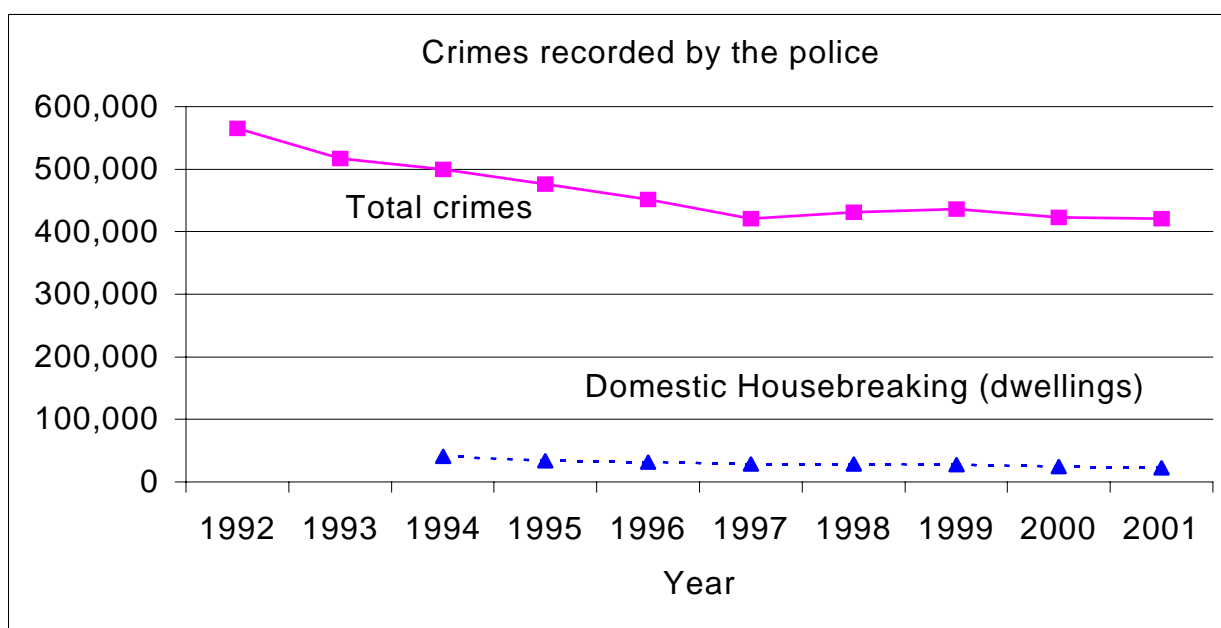
We are tackling homelessness in a number of ways, including:

- Delivery of the recommendations of the *First Report of the Homelessness Task Force*³ through Part I of the *Housing (Scotland) Act 2001* which expanded the rights of homeless people and increased the duties on local authorities. In particular local authorities are now required to make assessments of homelessness and establish strategies for preventing and alleviating homelessness in their area. Since September 2002 everyone assessed as homeless has had the right, as a minimum, to temporary accommodation, advice and assistance.
- Acceptance of the 59 recommendations of the *Final Report of the Homelessness Task Force*³, including both legislation proposals and a wide range of administrative and good practice recommendations to prevent and alleviate homelessness. A Homelessness Monitoring Group has been established to monitor the delivery of the Report.
- Legislative recommendations from the Task Force Report are being taken forward in the *Homelessness etc. (Scotland) Bill*, currently before Parliament, which will establish the 'other special reason' categories of priority need within primary legislation; provide for the establishment of a timetable for the expansion of priority need with a target date of 2012 for its eventual abolition; change the current duty on local authorities to investigate intentionality to a power to do so; and ensure a continuing duty by local authorities for the provision of accommodation and support to households found to be intentionally homeless.
- The *Homelessness etc. (Scotland) Bill* will also introduce provisions which will ensure that a household assessed as intentionally homeless has an opportunity to address the issues which led to the intentionality finding whilst accommodated in a short Scottish Secure Tenancy (SST) with support, to be converted to a permanent tenancy if successful, but at least has a right to some form of accommodation irrespective of the success of the short SST.

³ Available on the Scottish Executive website at: www.scotland.gov.uk/homelessness/reports.asp

Indicator 22. Crime

Total number of crimes



Crimes recorded by the police (000's)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total crimes	565	517	500	476	452	421	432	436	423	421
Domestic housebreaking (dwellings)			40	34	32	28	29	27	25	23

Source: Scottish Executive

The relevance of the indicator

Reducing crime is an important element in creating sustainable communities.

Detailed definition and source details

The indicator is defined as the total number of recorded crimes. The data is taken from the quarterly crimes made known return sent to the Scottish Executive Justice Department by the eight police forces in Scotland and published in the annual statistical bulletin *Recorded Crime in Scotland*¹.

The quarterly crimes made known statistical return is a simple count of the numbers of crimes and offences recorded and cleared up by the eight police forces in Scotland. One return is made every quarter for each Council in Scotland and these are aggregated to give police force and national totals. Each crime/offence is recorded under an individual category and these categories can then be aggregated to form various crime/offence groups.

¹ Available on the Scottish Executive website at: www.scotland.gov.uk/stats/bulletins/00157-00.asp

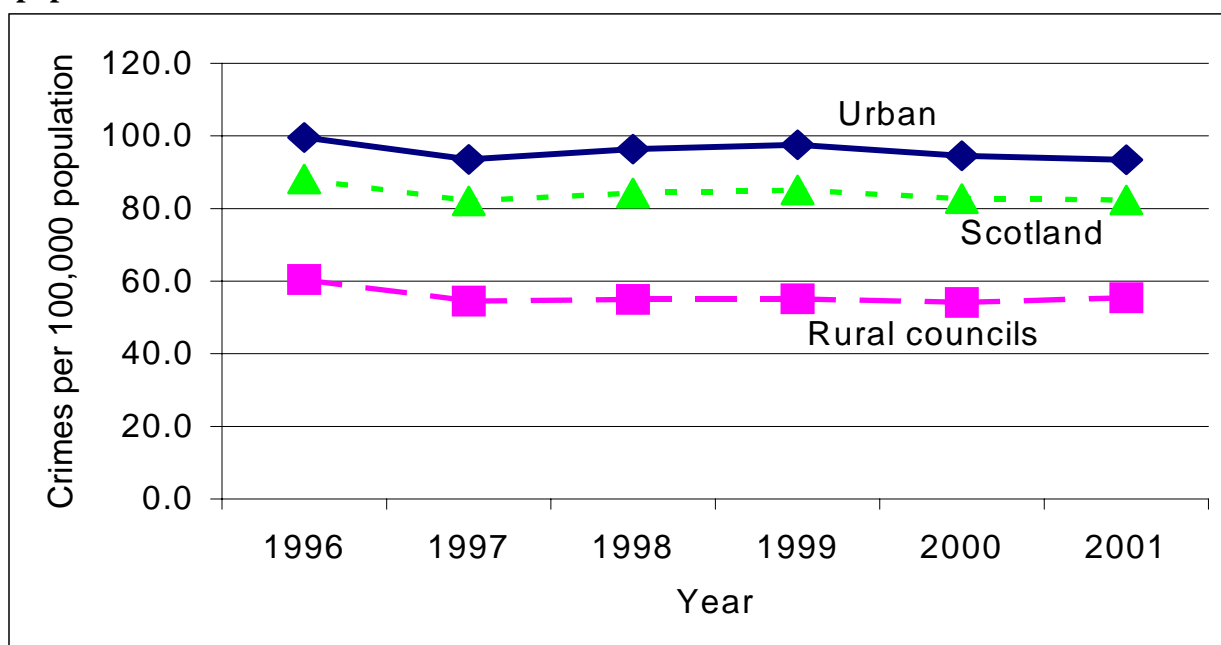
Trends

In 2001, the number of crimes recorded by the police fell for the second consecutive year. The number of crimes in 2001 (421,093) was only slightly higher than the ten year low figure recorded in 1997 and was 27 per cent lower than the peak 1991 figure. Movements in recorded crime are influenced by trends in ‘Crimes of Dishonesty’ which includes the crime of ‘Domestic housebreaking (dwellings)’.

Further disaggregation

Crimes per 100,000 population are higher for urban councils than rural councils. Between 1996 and 2001, crime rates fell by 6% in urban councils and 8% in rural councils. Recorded crime figures are available from 1930 to 2001. Further disaggregation by type of crime is provided in the annual recorded crime statistical bulletins².

Number of crimes recorded by the police in urban and rural Council areas per 100,000 population



Crimes/100,000 population

Year	1996	1997	1998	1999	2000	2001
Urban Councils	99.6	93.6	96.4	97.5	94.6	93.5
Rural Councils	60.4	54.5	55.0	55.1	54.1	55.4
Scotland	88.1	82.1	84.3	85.1	82.7	82.3

Source: Scottish Executive

² Recent copies are available on the Scottish Executive website at: www.scotland.gov.uk

Target

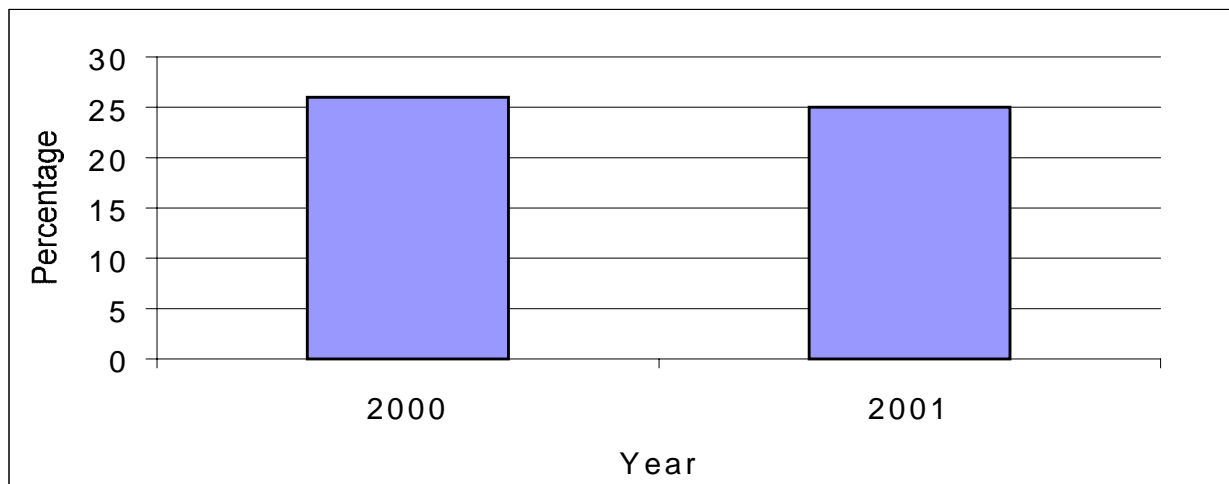
10% reduction in domestic housebreaking in dwellings by April 2004. The 2004 figure will be compared to the average figure for the years 1997-2000. Local targets for other crimes are being set by police forces.

Action

The Deputy First Minister announced the target for a reduction in domestic housebreaking on 2 May 2001. This target encourages local authority crime prevention issues, improvements in housing design and a focus on areas of high incidence by the police. A significant reduction in the number of incidences was recorded in 2001-02.

Indicator 23. Volunteering

Percentage of people taking part in voluntary activities (Social Justice Milestone 28)



Percentage of people taking part in voluntary activities

	2000	2001
Percentage volunteering	26	25

Source: Scottish Executive

The relevance of the indicator

Sustainable communities are ones in which every person both contributes to, and benefits from, the community in which they live. A high level of volunteering is a useful indicator of sustainable communities.

Detailed definition and source details

The indicator is defined as a proportion of adult respondents who, over the past 12 months, have given up any time to help any clubs, charities, campaigns or organisations in an unpaid capacity. The term 'adult' refers to persons aged 16 or over. The data is taken from annual results of the Scottish Household Survey (SHS), which is commissioned by the Scottish Executive and has been running since 1999. This survey covers private households and adults in private residence.

Trends

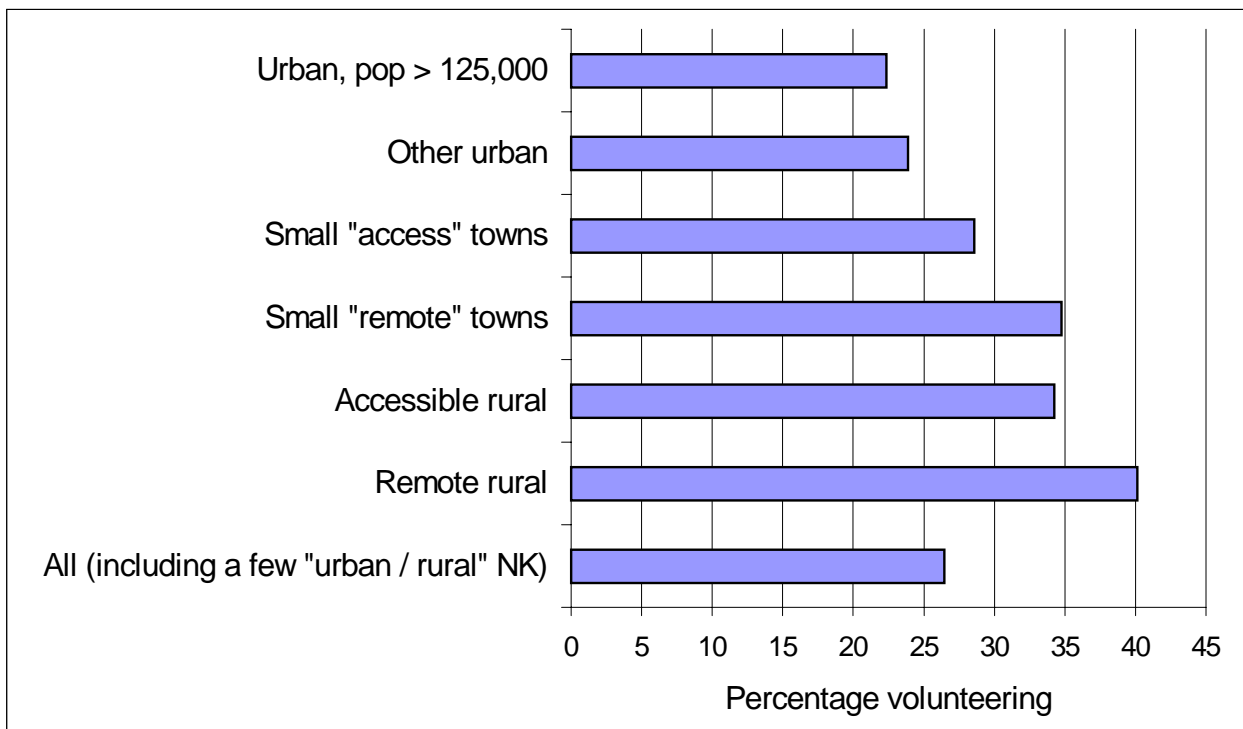
The question as worded in 2001 has only been asked since 2000. In 2000, 26 percent of those interviewed were giving up time for volunteering activities while in 2001 25 percent were doing so.

Further disaggregation

It is possible to disaggregate the SHS data in a number of ways including by age, gender, economic status and "urban / "rural" category. Forty per cent of those living in remote rural areas took part in voluntary activities in 2000 compared with 34% of those living in accessible rural areas. There was a similar 6 percentage point difference between those living

in small remote towns and those living in small accessible towns. Those living in large urban areas were least likely to take part in voluntary activities. (See the Annex for details of the SHS “urban / “rural” categories used below)

Percentage of people taking part in voluntary activities in urban and rural areas, 2000.



Percentage of people taking part in voluntary activities in urban and rural areas.

Urban/Rural area	2000
Urban, pop > 125,000	22
Other urban, pop > 10,000 - 125,000	24
Small "accessible" towns, pop > 3,000 - 10,000 within a 30 minute drive time from a settlement of 10,000 or more	29
Small "remote" towns, pop > 3,000 - 10,000 and more than a 30 minute drive time of a settlement of 10,000 or more	35
"Accessible" rural, pop < 3,000 within a 30 minute drive time of a settlement of 10,000 or more	34
"Remote" rural, pop < 3,000 and more than a 30 minute drive time of a settlement of 10,000 or more	40
All (including a few "urban / rural" NK)	26

Source: Scottish Executive

Target

No target but commitment to increase the number of people, from across all communities, taking part in voluntary activities.

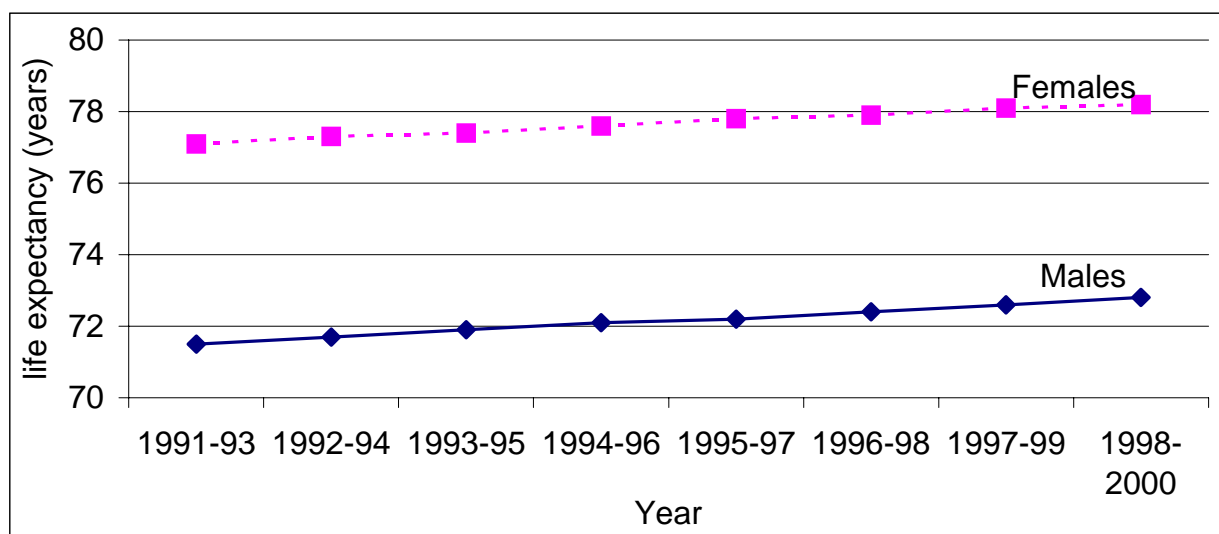
Action

We are taking forward the promotion of volunteering on a number of fronts.

- In 2001-02 we introduced the Active Communities Initiative. This is a 5-10 year strategy for supporting volunteering in Scotland. Broadening the range of volunteers and increasing the number of volunteers are two of the main objectives of the initiative. Over £2.2 million has been earmarked for the initiative in 2002-03.
- We are also funding the now complete network of Volunteer Centres across Scotland. Volunteer Centres promote and support volunteering at the local level and have a mission to involve more people, more effectively in volunteering. Funding of £2 million has been made available for the network in 2002-03.
- A review is also underway of the Millennium Volunteer programme, which promotes volunteering by young people aged between 16 and 25. The review will examine areas such as the age range of programme participants, the badging of the programme, the hours volunteered by participants and recognition of their efforts. Funding for the programme in 2002-03 is £695,000, but this might increase as a result of the review process.
- In addition, we are funding Volunteer Development Scotland, the national centre of excellence on volunteering in Scotland, and working with them on a range of initiatives designed to promote best practice in volunteering opportunities.

Indicator 24. Health

Life expectancy at birth (years)



Life expectancy at birth (years)

Year	1991-1993	1992-1994	1993-1995	1994-1996	1995-1997	1996-1998	1997-1999	1998-2000
Males	71.5	71.7	71.9	72.1	72.2	72.4	72.6	72.8
Females	77.1	77.3	77.4	77.6	77.8	77.9	78.1	78.2

Source: Government Actuary's Department

The relevance of the indicator

Sustainable development includes a healthy nation in which everyone can live in good health or has access to help if that is not the case.

Choice of Indicator

An indicator of "expected years of healthy life" is currently being developed. This will take into account the quality of life as well as years of life.

Detailed definition and source details

Life expectancy at birth for a particular time period is an estimate of the number of years a new born baby would survive if they were to experience the average age specific mortality rates of that time period throughout their entire life. Therefore the figures reflect the mortality rates at the particular time period and not the number of years that a baby born in that time period could expect to live since death rates are likely to change in the future. The figures have been extracted from complete ungraduated annual life tables prepared by the Government Actuary's Department. Life expectancy figures are presented as 3 year rolling averages to smooth out variation in death rates between years.

Trends

Throughout the 1990's, life expectancy at birth has continued to increase steadily for both males and females. There has been an increase of around 0.2 years of life in each year for both males and females.

Further disaggregation

Life expectancy figures are available by health board and local authority areas for:

- 1995-97 in *Health Service Quarterly 9, Spring 2001*¹
- 1997-99 in *Health Service Quarterly 11, Autumn 2001*², and
- 1998-2000 in *Health Statistics Quarterly 13, Spring 2002*³

Within the UK for 1998 to 2000, England had the highest life expectancy at birth at 80.3 years for females and 75.5 years for males. Scotland had the lowest life expectancy at 78.2 years for females and 72.9 years for males. Within Scotland there are regional differences. For 1998 to 2000, Orkney had the highest life expectancy at birth for females at 81.3 years and the Borders had the highest for males at 75.3 years. Greater Glasgow had the lowest life expectancy for both females and males at 76.8 years and 70.5 years respectively.

Target

No current target. An indicator of "expected years of healthy life" is currently being developed. This will take into account the quality of life as well as years of life.

Action

Our policy for improving health is set out in *Towards a Healthier Scotland*⁴ (1999). This combines three approaches:

- addressing the many wider causes of ill health by addressing life circumstances;
- influencing lifestyles to minimise the health related lifestyle behaviours that lead to preventable early death; and
- focusing on priority health topics, concentrating on the major preventable diseases and on improving child, mental, oral and sexual health.

A great deal of action is under way which is likely to improve health. It can be summarised as:

- Major investments: £15 million over three years in four national health demonstration projects, £100 million over three years in the Health Improvement Fund and the £34.5 million NOF-funded network of Healthy Living Centres
- Specific Health Department led actions in relation to smoking, diet, alcohol, drug misuse, physical activity, mental health, sexual health, oral and dental health and other topics.

¹ www.statistics.gov.uk/download/theme_health/HSQ9book_V1.pdf

² www.statistics.gov.uk/downloads/theme_health/HSQ11_v3.pdf

³ www.statistics.gov.uk/downloads/theme_health/HSQ13_v4.pdf

⁴ Available on the Scottish Executive website at: www.scotland.gov.uk/library/documents-w7/tahs-00.htm

- Activity across the Executive and beyond, including, for example, health promoting and new community schools, the warm deal initiative, the £350 million package for central heating for pensioners and social tenants and the Working Families Tax Credit.

RURAL AND URBAN AREAS: CLASSIFICATIONS USED IN THIS REPORT

Two classifications have been used to distinguish between urban and rural areas.

Rural and Urban Councils

Where data is available at the local authority level, each authority has been classed as either Rural or Urban according to its population density. The assignment is shown in the following table.

Rural Councils	Urban Councils
Aberdeenshire	Aberdeen City
Angus	Clackmannanshire
Argyll & Bute	Dundee City
Dumfries & Galloway	East Dunbartonshire
East Ayrshire	East Lothian
Eilean Siar	East Renfrewshire
Highland	Edinburgh, City of
Moray	Falkirk
Orkney Islands	Fife
Perth & Kinross	Glasgow City
Scottish Borders	Inverclyde
Shetland Islands	Midlothian
South Ayrshire	North Ayrshire
Stirling	North Lanarkshire
	Renfrewshire
	South Lanarkshire
	West Dunbartonshire
	West Lothian

Scottish Household Survey

Where data were obtained from the Scottish Household Survey (SHS), use was made of the 6-fold urban-rural classification used in the survey.

The classification for use with the SHS was agreed following extensive discussions with a range of interested parties. The definition is based on postcode units, and distinguishes between both settlement size and remoteness, as follows:

Settlement size

To create settlements, the General Register Office for Scotland (GROS) use the boundaries they maintain for each unit postcode. A simplified definition of a settlement is a set of contiguous postcode units grouped so that:

- each postcode unit contains at least a given number of addresses per hectare and
- the group contains at least 500 residents. The largest is based in Glasgow comprising most of the western central belt with a population of some 1.1 million in 2001.

Within the SHS, settlements are divided into 4 sizes:

- Large Urban areas (based on the four cities): settlements of 125,000 or more
- Other urban areas: Settlements of 10,000 population or over and below 125,000
- Small towns: Settlements of 3,000 population or over and below 10,000
- Rural: Settlements below 3,000 population and those not living in settlements.

Remoteness

Drive time data and GIS are used to distinguish between accessible and more remote/peripheral rural areas using 30 minutes drive time from settlements of size 10,000 or more as the threshold, leading to a 2-fold definition of remoteness:

- Accessible: 30 minutes or less drive time from a settlement of 10,000 or over
- Remote: more than a 30-minute drive time from a settlement of 10,000 or over

Using these 2 criteria, a 6-fold area definition of rural Scotland was developed as set out below:

	Area type	Postcode units in
1	Large urban areas.	Settlements with population of 125,000 or more
2	Other 'Urban'	Other settlements of 10,000 population or more
3	'Small, accessible towns'	Settlements with population 3,000-9,999 <u>and</u> within a 30 minute drive time of a settlement of 10,000 or more
4	'Small, remote towns'	Settlements 3,000-9,999 <u>and</u> more than a 30 minute drive time of a settlement of 10,000 or more
5	'Accessible rural'	Settlements with population less than 3,000 <u>and</u> within a 30 minute drive time of a settlement of 10,000 or more
6	'Remote rural'	Settlements with population less than 3,000 <u>and</u> more than a 30 minute drive time of a settlement of 10,000 or more

This definition of rural was used in the first annual report on the Scottish Household Survey *Scotland's people: results from the 1999 Scottish Household Survey: Volume 1* (Scottish Executive 2000).

Where results for more than one year are presented, data for 1999 and 2000 make use of the GROS 2000 settlement index while data for 2001 make use of the GROS 2001 settlement index.

Further details of the GROS settlement index can be found at:
www.gro-scotland.gov.uk/grosweb/grosweb.nsf/pages/geogrphy

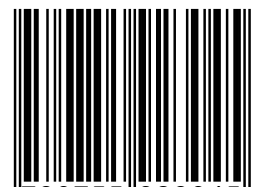


Small changes in the way we perform everyday tasks can have huge impacts on Scotland's environment.

Walking short distances rather than using the car, or being careful not to overfill the kettle are just two positive steps we can all take.

This butterfly represents the beauty and fragility of Scotland's environment. The motif will be utilised extensively by the Scottish Executive and its partners in their efforts to persuade people they can do a little to change a lot.

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