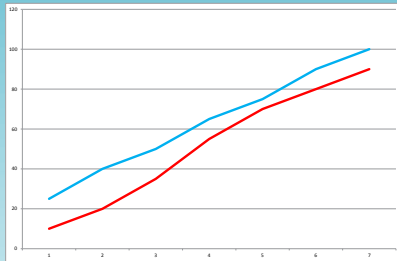
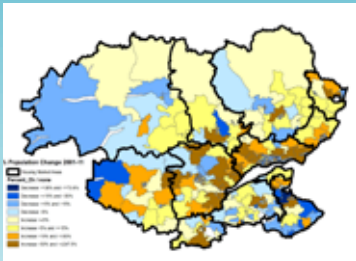




TAYplan Monitoring Statement

April 2014

Progressing towards the outcomes



TAYplan Monitoring Statement 2014

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Front Cover Acknowledgements

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TAYplan Monitoring Statement 2013: Introduction and Summary

Purpose of this Monitoring Statement

The Monitoring Statement helps us to understand progress towards achieving the vision set out in the approved TAYplan (2012):

'By 2032 the TAYplan region will be sustainable, more attractive, competitive and vibrant without creating an unacceptable burden on our planet. The quality of life will make it a place of first choice where more people choose to live, work, study and visit, and where businesses choose to invest and create jobs.'

The ultimate outcome of this vision is about ensuring that more people have a better quality of life. This vision is underpinned by four intermediate outcomes which are collectively necessary to bring about the vision:

- More people are healthier;
- Through sustainable economic growth the region's image is enhanced;
- We live, work and play in better quality environments; and,
- We live within Earth's environmental limits

This Monitoring Statement helps us to understand progress towards delivering these intermediate outcomes and thus the vision. It also helps us to monitor some of the features considered in the TAYplan Strategic Environmental Assessment (SEA) 2010. This information will help inform the next Strategic Development Plan.

There is a legal requirement to prepare a Monitoring Statement under section 4 of the Town and Country Planning (Scotland) Act 1997(as amended under the Planning etc. (Scotland) Act

2006). This requires Strategic Development Planning Authorities to prepare a monitoring statement from time to time but requires them to publish one alongside the Main Issues Report. The last TAYplan Monitoring Statement was prepared in April 2010, alongside the Main Issues Report (2010).

This Monitoring Statement monitors the policies of the Approved TAYplan (2012) within the context of the outcomes described here.

Monitoring Statement Structure

This Monitoring Statement is structured around four chapters, each of which considers one of the four intermediate outcomes.

Each chapter is also broken down to another level of sub-outcomes, themselves collectively necessary to support each intermediate outcome. In each case progress is reported.

A description of each intermediate outcome and sub-outcome is provided in the blue boxes within each chapter. Similarly a summary of progress towards these is reported in the pink boxes in each chapter.

Reporting on progress

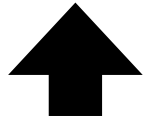
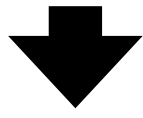
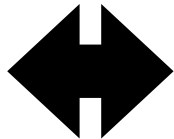
Each intermediate outcome and sub-outcome includes a list of relevant indicators and a flow chart showing how these relate to the intermediate outcome.

Progress is reported using arrows (see diagram to the right). This uses the same descriptions as the National Framework for 'Scotland Performs'.

Indicators

No single indicator can tell us about performance so it is necessary to use several. Many are taken from existing groups of indicators including the Scottish Local Authority Economic Development (SLAED) indicators and the Scottish Government and Improvement Service Menu of Outcome Indicators. However, some additional indicators have also been used.

Progress Reporting

	Progress is improving
	progress is worsening
	progress is maintaining

Other evidence

Besides this Monitoring Statement TAYplan has published or considered numerous other pieces of research and other work. These are referenced in the four Topic Papers (2014) that accompany the TAYplan Main Issues Report 2014. Together these provide the evidence base which has informed the TAYplan Main Issues Report 2014.

Summary of all outcomes

This section summarises the main monitoring conclusions for approved TAYplan (2012) and the Strategic Environmental Assessment (2010). This section is categorised by the four intermediate outcomes implied by the TAYplan (2012) vision.

More people are healthier

Average life expectancy at birth has risen partly due to general improvements in underlying health and clinical treatments. However, there remain strong socio-economic disparities. Also lifestyle choices show comparatively low activity rates and either no change or a fall in active travel; despite the majority of the region's homes being built in principal settlements. Although this suggests that the approved TAYplan (2012) is pursuing the appropriate strategy to locate new development there continues to be a need to reduce socio-economic disparities and for early years interventions to avoid future health issues.

Through sustainable economic growth the region's image is enhanced

The global economic downturn has been felt across the UK. Here there have been falls in productivity, in employment and economic activity rates, and in business starts and business survival. There has also been growth in the proportion of the working age population claiming Job Seeker's Allowance and some growth in the population living in areas ranked amongst Scotland's 20% most deprived. However, there continues to be important sectors of the economy with strong potential to grow and the region's image also continues to be enhanced.

There is sufficient effective housing and employment land, although returning to higher

construction output will take time. This is important in supporting the economic recovery when confidence begins to grow in the lending markets. The approved TAYplan (2012) approach provides certainty to investors and contributes to making the area attractive to create jobs. It will be for those agencies and organisations with a role in marketing, training and construction to help deliver a skilled workforce. There is already some evidence of this with improvements in skills and qualifications of the workforce.

We live, work and play in better quality environments

Overall a series of factors suggest improvement/continuity in the quality of the environments within which we live, work and play. The approved TAYplan (2012) strategy of focusing the majority of new development in principal settlements and protecting and enhancing important sensitive assets remains relevant to delivering this outcome.

Despite most people living in principal settlements, the most significant population growth over the last decade was in higher priced urban neighbourhood and parts of the countryside surrounding the largest settlements. This shows that whilst the region's environmental quality has improved, or remains high, place quality perceptions remain important. The approved TAYplan (2012) approach to place shaping remains relevant but the most pressing challenges continue to be about making the region's most sustainable locations also places where people choose to live.

We live within Earth's environmental limits

Energy consumption and carbon dioxide emissions have fallen and more electricity is generated from renewable sources. But the economy and society

remain heavily reliant on gas and petroleum for heat and transport. Although the approach in the approved TAYplan (2012) continues to support this outcome; the decarbonisation of heat and travel remain central challenge in meeting the requirements of the Climate Change (Scotland) Act 2009.

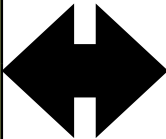
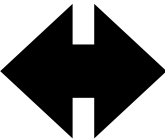


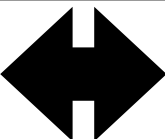

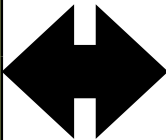
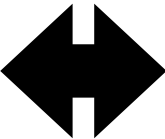

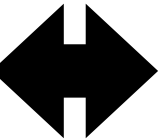










Overall waste production has fallen, less waste goes to landfill and more is reused, recycled or composted. However, there is still some way to go to meet the Zero Waste Scotland targets.

New homes and businesses have mostly been built in places that reduce the risk of adversely affecting carbon rich soils. But there continues to be a challenge between concentrating development in principal settlements and the fact that land around these is amongst the most productive for agriculture and tree planting.

Overall

This suggests good progress towards meeting the intermediate outcomes and thus the vision. It suggests that the general approach in the approved TAYplan (2012) remains appropriate with some possible enhancements. It also shows the role of other organisations in delivering the outcomes. But the recent economic downturn shows how the wider economy and factors at play in the wider market continue to place strong pressures on people's lives.

Although this has presented some challenging circumstances, on balance, the strategy and decision making framework set out in the approved TAYplan (2012) remains appropriate.

Intermediate Outcome	Progress	Sub-Outcome	Progress	Intermediate Outcome	Progress	Sub-Outcome	Progress				
More people are healthier		Fewer people are excluded from society		We live, work and play in better quality environments		People and businesses are exposed to lower levels of risk and impact from hazardous events					
		People take up healthier and more active lifestyles				Ecosystems thrive					
Through sustainable economic growth the region's image is enhanced		Communities are more prosperous and the economy is more resilient				We live within Earth's environmental limits		More people choose to visit our area, stay longer and spend more			
		Fewer people are excluded and more people can participate in society and the economy						The built environment is well maintained and people continue to use it			
Key Progress is improving  Progress is worsening  Progress is maintaining 										Home and neighbourhoods in principal settlements meet people's needs and aspirations	
										Access to markets, jobs, services and facilities by non-car transport is improved	
				We have moved to a low carbon economy							
				We have moved to a zero waste economy							
								Finite resources are protected from sterilisation for use by present and future generations			

Intermediate Outcome: More people are healthier

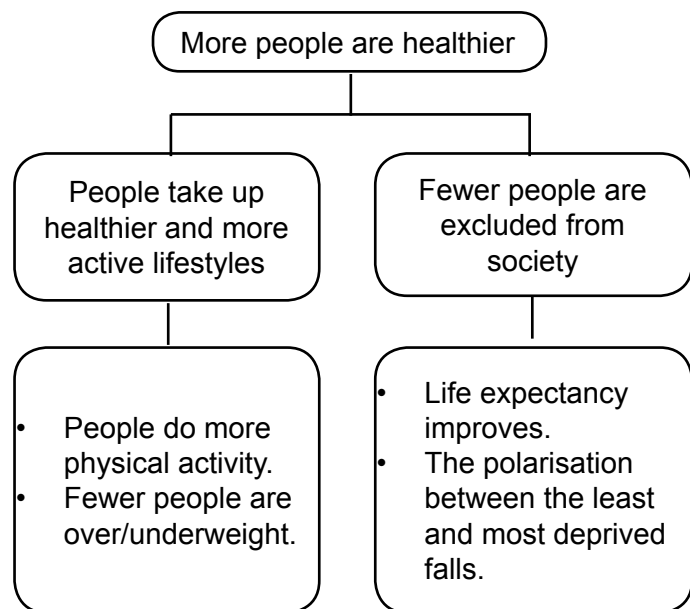
Introduction

1.0 If people are to achieve a better quality of life they must be healthier. Our surrounding environments, our economic circumstances and the lifestyle choices and behaviours combine to determine our health. These are reinforced by health and care services when issues occur. The outcome diagram and the indicators table (right) set out the areas that are examined in this monitoring statement and the indicators being used. Some of the factors considered in other chapters contribute to our understanding of whether we live healthier lives.

Table of Indicators

Sub-Outcome	Indicators	Source(s)	Rationale
Fewer people are excluded from society	Self-Assessed Health.	Scottish Household Survey.	These indicators help us to understand underlying health trends and inequalities in health experience.
	Life Expectancy at Birth.	NHS Scotland.	
	Health Inequality and Deprivation.	Scottish Indices of Multiple Deprivation.	
	Homelessness.	HL1 Data.	
People take up healthier and more active lifestyles	Physical Activity.	Scottish Health Survey.	These indicators help us to understand how healthy people's lives are by examining some of their lifestyle behaviours.
	Obesity and Overweight.		
	Body Mass Index (BMI) of Primary 1 School Children.	NHS Scotland.	
	Proportion of Children walking and cycling to school.	Scottish Household Survey.	
	Proportion of journeys to work made by walking, cycling, bus and train.		

Outcome Flow Diagram



Progress towards this outcome

Life expectancy at birth shows general improvement in health and mortality rates. There has also been a fall in those who are amongst the most health deprived. However, despite these improvements there continues to be significant disparities between the health experiences of the least and most deprived in society.

The least deprived tend to have a higher life expectancy. Although general health appears to have improved there has been a movement away from healthier and more

active lifestyles as physical activity rates for most people sit below recommended levels and transport choices using active travel modes remain relatively constant.

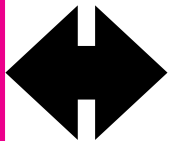
The key drivers appear to be lifestyle choices made after primary 1 age. This illustrates the importance of pre-birth and early years before Primary 1 in affecting life outcomes.

Sub-Outcome: Fewer people are excluded from society

What: Exclusion from society can often be as a result of economic circumstances where the poorest in society are unable to purchase or consume resources, services or activities which others can. This can have a disproportionate impact on health and therefore measures to improve people's economic and social circumstances can also bring health benefits.

How: Approved TAYplan (2012) Policies 1, 2, 3 and 5 have a role in ensuring that the location, design and layout of development provide good quality homes and neighbourhoods that improve and do not disadvantage the health and quality of life of their inhabitants. Approved TAYplan (2012) Policies 3, 4, 6 and 7 also have a role to play in supporting sustainable economic growth which can, in turn, influence people's potential to access work and to improve their personal economic circumstances. This has a direct consequence for people's life experience and their ability to avoid choices that would adversely affect their health. The direct economic factors are considered in the sustainable economic growth chapter of this Monitoring Statement. This chapter is concerned with levels of inequality relating to health.

Progress towards this outcome

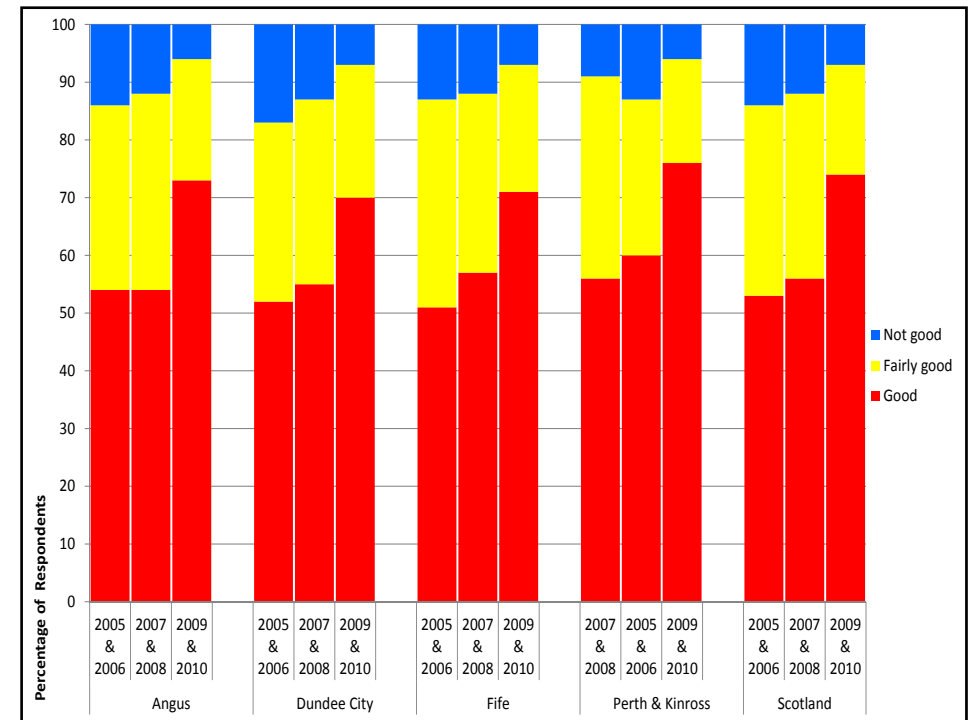


There has been a general reduction in the number of people living in areas categorised amongst the most health deprived and there has also been an improvement in life expectancy and perceived health. These changes have been driven by a mixture of lifestyle choices and better awareness as well as better clinical treatments and practices. The recent economic downturn may well have contributed to a slight increase in health deprivation. Despite this overall improvement in health the disparities in health experience remain marked and there are strong linkages between personal economic and social circumstances and health. Therefore there is movement in the right direction but the challenge remains to narrow the disparities through reducing exclusion. This indicates the continued importance of planning for sustainable economic growth by identifying land, premises and infrastructure improvements to support trade in strategic planning policy as well as broader interventions relating to skills. These are collectively required in future to assist in removing some of the barriers to improving personal socio-economic circumstances.

People's Perception of their own health improves

1.1 People's perception of their own health within TAYplan local authorities and in Scotland as a whole has improved over time. This is consistent with some of the analysis below which reports falls in health deprivation and increasing life expectancy. The percentage of people with the perception they possess 'Good' health has increased over time, and the percentage of people assessing their health as 'Not good', has fallen.

Figure 1: Comparison of Self-Assessed Health comparing TAYplan local authorities and Scotland (2005-06 to 2009-10)



Source: Scottish Household Surveys 2005/06, 2007/08 and 2009/10

Life expectancy at birth is increasing

1.2 Life expectancy at birth applies the current mortality rates at the time of birth to estimate the likely life expectancy of the child. It cannot, however, account for choices and issues later in life which may impact on life expectancy such as smoking, substance misuse, diet and exercise, economic circumstances, illness and accidents. However it serves as a proxy for general health improvement over time.

1.3 Rising life expectancy at birth suggests that overall mortality rates have fallen, which can reflect better medical treatments and more healthy behaviours. But it also means that people with life threatening illnesses may live longer but may not be cured. There are 2 key drivers and the land use planning system is a direct contributor to the first:

- a. People are choosing/are able to choose to live healthier lifestyles which are driven by place quality, access to jobs, services and facilities, diet, alcohol consumption and exercise; and
- b. Survival rates for illnesses are improved by better medical procedures and care.

1.4 In the TAYplan area there is a consistent pattern of increasing life expectancy at birth. This continues to be higher for females than for males, but, the rate of increased life expectancy for males is higher than for females. This suggests that male mortality rates have fallen more markedly. Part of this may be because men are now less likely to be employed in hazardous industries and to contract industrial illnesses. It may also be driven by the factors suggested in paragraph 1.3 above.

1.5 There are however distinct disparities within the TAYplan area. Life expectancy at birth for the local authority areas of TAYplan are all

similar or above the Scottish average except for Dundee City. Average life expectancy at birth is lower in Dundee City for both males and females than for the other parts of the TAYplan area. Glenrothes and North East Fife is the closest proxy available for North Fife, and shows longer life expectancy than Fife as a whole.

1.6 There appears to be a strong link between life expectancy and deprivation. The average life expectancy at birth for males living in areas ranked amongst Scotland's 10% most deprived is 12 years less than those living in areas ranked amongst Scotland's least deprived 10%. For females the equivalent gap is closer to 8 years.

1.7 The Sustainable Economic Growth section of this Monitoring Statement shows that the largest concentrations of Scotland's most deprived population in the TAYplan area are within Dundee, Perth and Arbroath. This perhaps offers some explanation for lower average life expectancy at birth in Dundee City as this council area represents almost all of the urban area of Dundee. The authorities for the other two settlements cover much wider geographies.

Health Deprivation has fallen

1.8 The Scottish Index of Multiple Deprivation (SIMD) 2012 combines 38 indicators across 7 domains: income, employment, health, education, skills and training, housing, geographic access and crime. The following are individual health indicators that make up the Health domain of SIMD 2012:

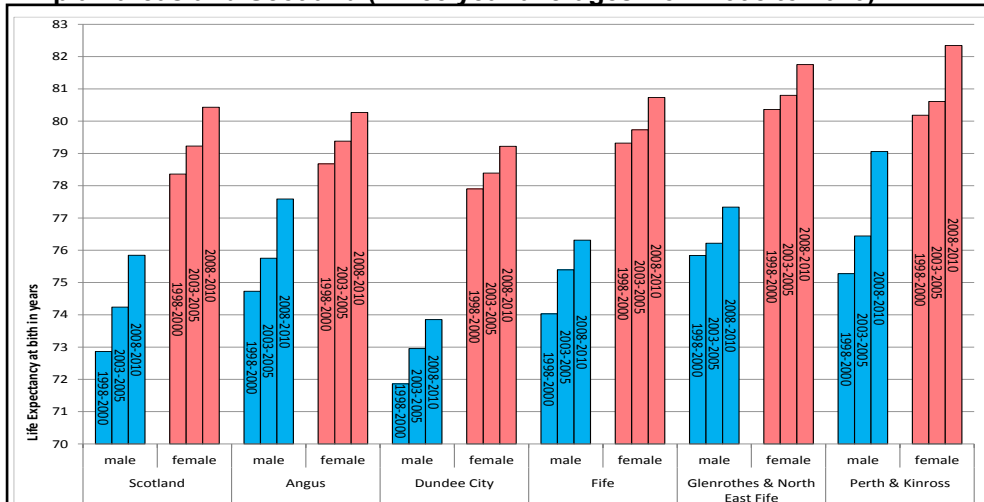
- Standardised mortality ratio;
- Hospital stays (Continuous Inpatient Stays [CIS]) related to alcohol misuse: standardised ratio;
- Hospital stays (CIS) related to drug misuse standardised ratio;
- Comparative Illness Factor: standardised ratio of

observed to expected emergency stays in acute NHS hospitals in Scotland;

- Emergency stays (CIS) in hospital: standardised ratio
- Estimated proportion of population being prescribed drugs for anxiety, depression or psychosis;and,
- Proportion of live singleton births of low birth weight.

1.9 The SIMD 2012 health domain shows TAYplan's highest concentrations of Scotland's 20% most health deprived areas are located in Dundee, Perth and Arbroath. Those parts of the TAYplan area which include Scotland's 20% least health deprived areas are generally in the countryside with some concentrations in principal settlements the mortality rates already described may go some way to explaining this.

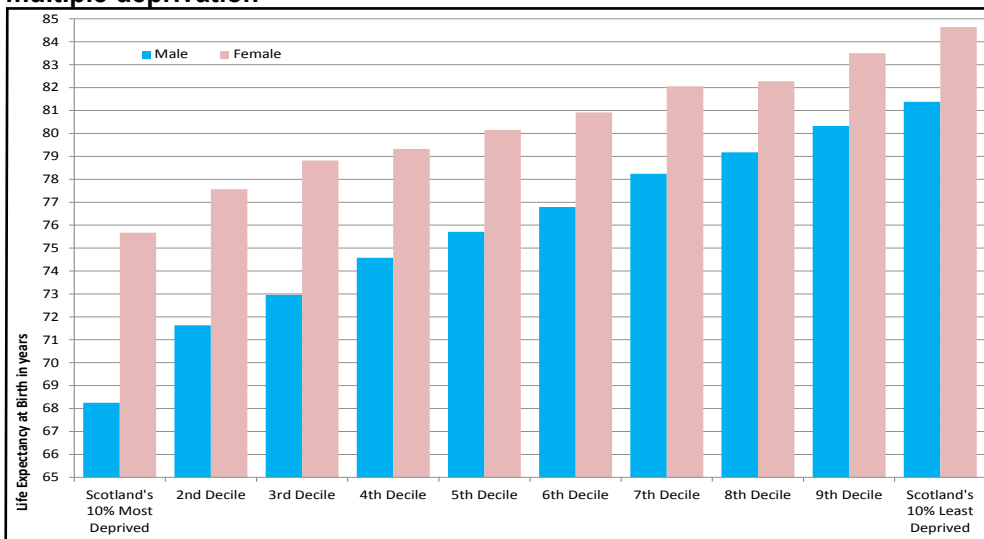
Figure 2: Average Life Expectancy at Birth for Men and Women comparing TAYplan areas and Scotland (Three year averages from 1998 to 2010)



Source: NHS Scotland

Note: Glenrothes and North East Fife is the closest proxy for North Fife

Figure 3: Life expectancy: Disparities in life expectancy by decile of multiple deprivation



Source: NHS Scotland and Scottish Index of Multiple Deprivation (2009)

Note: This abridged life expectancy table is constructed from the estimated population in 2008, 2009 and 2010 and the total number of deaths registered in these years. The figures show the number of years of life at birth subject to the 2008-2010 mortality probabilities.

Figure 4: TAYplan Area Data zones that are amongst Scotland's 20% Most Health Deprived and 20% Least Health Deprived Areas according to the Scottish Index of Multiple Deprivation 2012 Health Domain.

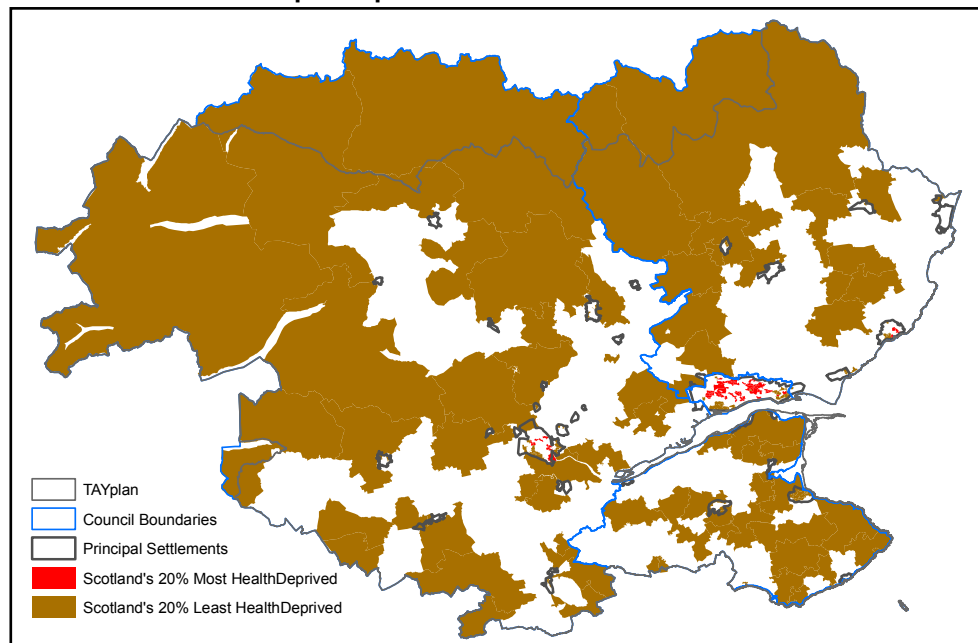
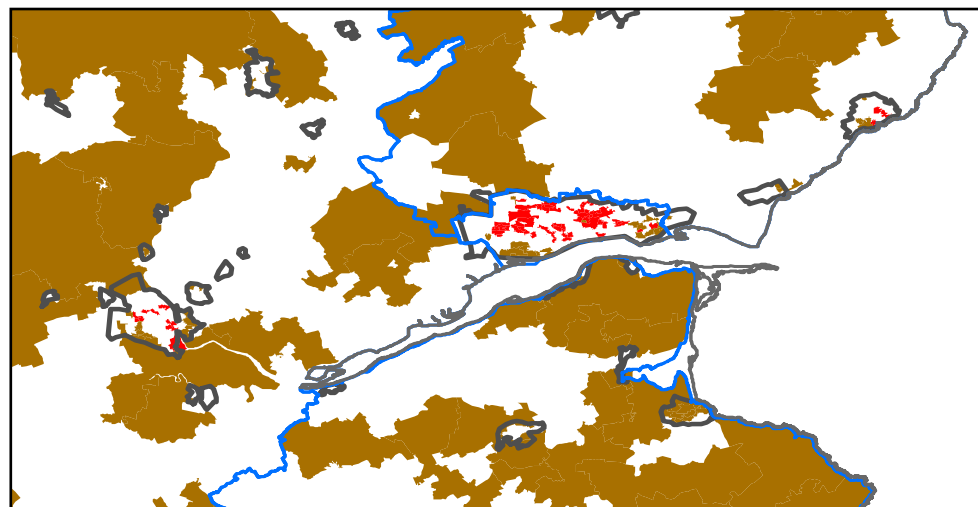


Figure 5: Zoom In Perth, Dundee and Arbroath (three largest settlements)



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Source: Scottish Index of Multiple Deprivation (Health Domain) 2012

1.10 Those living in Scotland's 20% most health deprived areas within the TAYplan area have consistently represented the minority of TAYplan population (2004 to 2012), accounting for only 14.7% of the total population at the most. Overall the population in these areas has gradually fallen numerically and proportionally over the same time period. However, there was a slight increase between 2009 and 2012. However, the majority of people in TAYplan who live in areas ranked amongst Scotland's 20% most health deprived (and also those in the 2nd Quintile) are concentrated in Dundee City, making up over 55% of Dundee City's population in 2011. The largest concentration of people living in areas ranked amongst Scotland's 20% least health deprived are in Perth and Kinross and North Fife.

1.11 The pattern of falls and rises in health deprivation also matches that of overall deprivation over the same time period. This continues to suggest a strong link to the economy and its social consequences. This suggests that people who are the most health deprived are also likely to be amongst the most economically deprived. Therefore the recent economic downturn may well have contributed to the slight increase in those living in areas ranked amongst Scotland's 20% most

health deprived between 2009 and 2012. It is possible that this may have influenced health deprivation through the following:

- Increased incidences of alcohol and drug misuse;
- Increased proportion of the population being prescribed drugs for anxiety, depression or psychosis;
- Increased time spent in hospital, including as a result of the first two bullets.

1.12 Those amongst Scotland's least health deprived 20% have also consistently fallen. As the Scottish Index of Multiple Deprivation is a relative system of ranking, an area could experience change in its rank as a result of being outperformed by other areas rather than by internal change. Also, age-related mortality or illness is a possible factor that may help to explain these changes. We also need to recognise that people are leading increasingly sedentary lives which can have consequences for general health.

Figure 6: Changes in TAYplan Data zone Population by Quintiles using the Scottish Index of Multiple Deprivation Health Domain 2004 to 2012

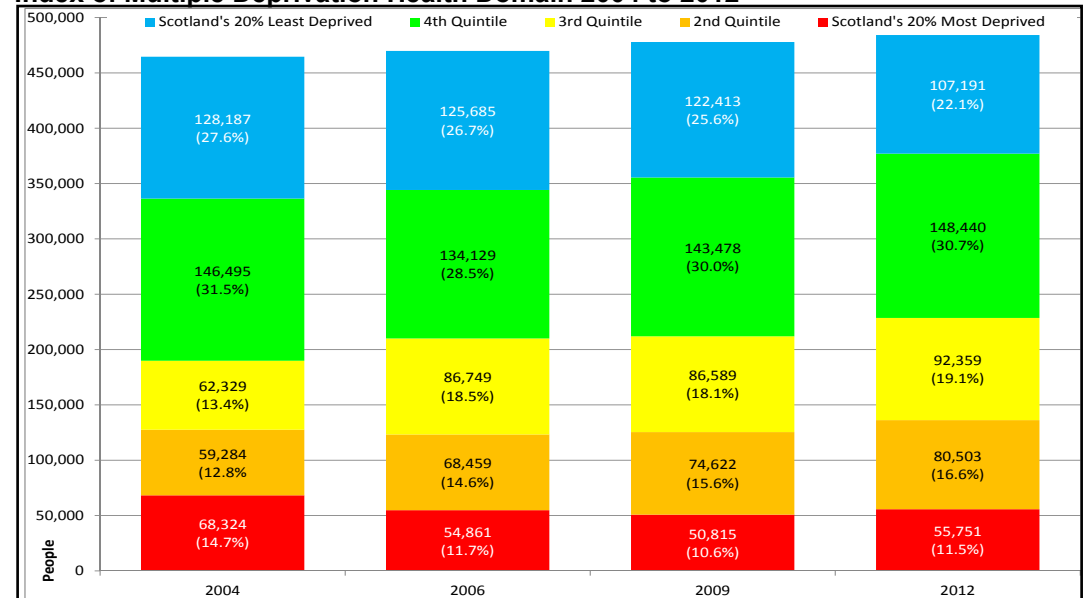
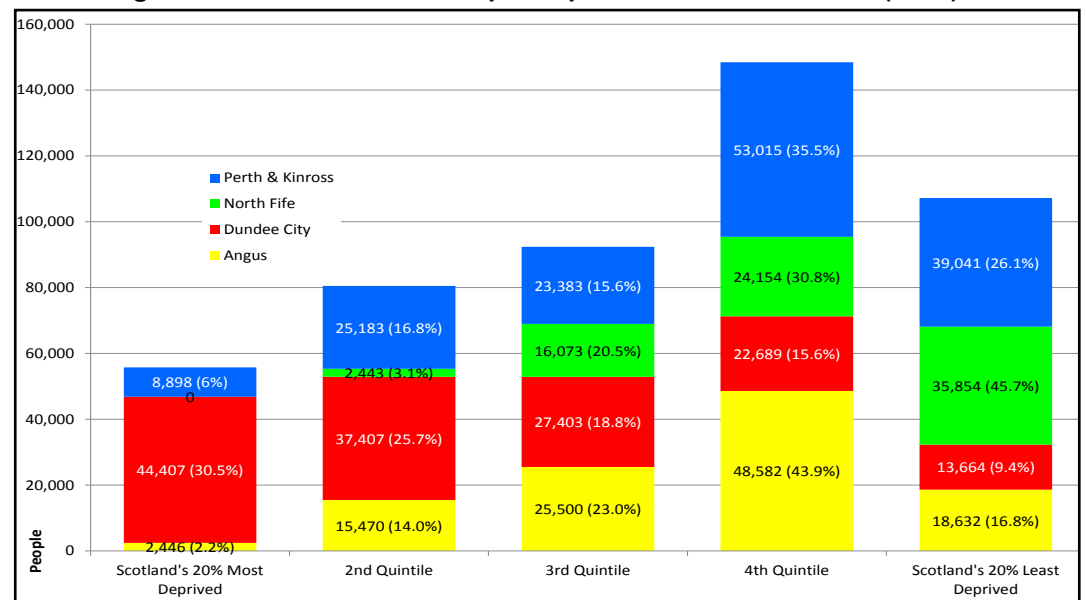


Figure 7: Distribution of Population (2011) at local authority level within the TAYplan area using the Scottish Index of Multiple Deprivation Health Domain (2012)



Source Source: Scottish Indices of Multiple Deprivation and National Records of Scotland
 Note: 2012 SIMD figures are compared with the 2011 Mid-Year Population Estimates

Homelessness applications have risen

1.13 Under homelessness legislation, anyone who is homeless or threatened with homelessness can make a homeless application to their local council. The council will assess their situation and decide whether they are eligible for assistance. Homelessness applications help us to understand not only the scale of those in this situation but also those likely to be affected by the health consequences of this.

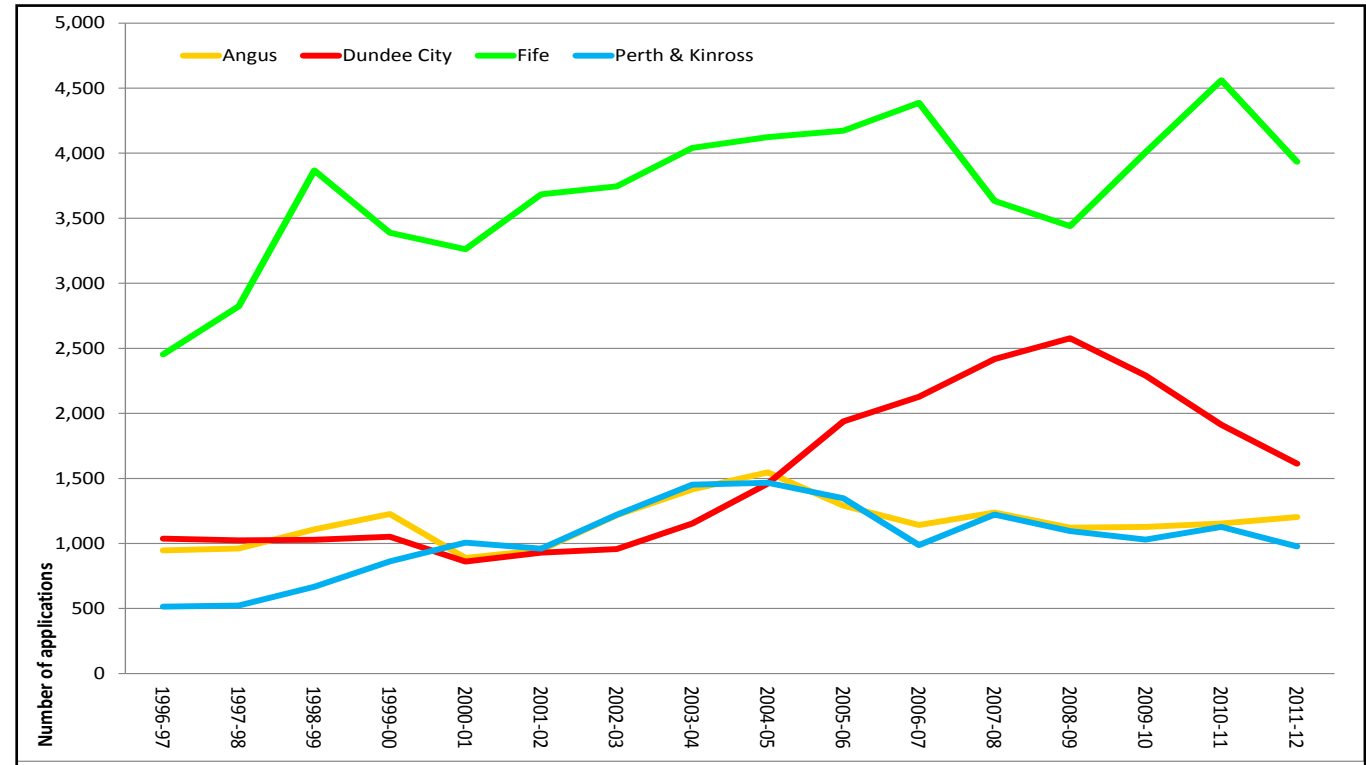
- The highest numbers of applications are in the whole of Fife but it should be recognised that Fife has over twice the population of the other authorities. Applications crept up over the decade to 2007/08. Thereafter applications fell until 2008/09 when they began to increase to a peak of 4,500 in 2010/11.

- After a period of relatively static numbers of applications, around 1,000 per year, in Dundee City the number more than doubled between 2002/03 and 2008/09. Since then it has dropped substantially. Similarly Angus saw around 1,000 applications per year to 2001/02 growing to 1,500 in 2004/05 but returning thereafter to around 1,000 per year.

- Perth & Kinross saw applications triple from 500 in the mid-1990s to 1,500 by 2003/04. Although these fell afterwards they have remained approximately 1,000 per year.

1.14 Although all authorities have seen a fall in applications since their own respective peaks, the number of applications now remains higher than during the 1990s. Homelessness applications have therefore grown.

Figure 8: Number of applications under the Homeless Persons legislation by local authority: 1996-97 to 2010-12



Source: HL1 Data from Scottish Government

Overall

1.15 The available data covers only some of the operational period of the approved TAYplan (2012). But it is clear that falling levels of exclusion, as measured by health deprivation and the wider Scottish Index of Multiple Deprivation make the link between health and socio-economic circumstance.

1.16 Regeneration and new development over the last decade that adhered to the principles of approved TAYplan (2012) policies 1, 2 and 8 has contributed to better quality places for people to live, work and play and thus in some way to

reducing exclusion from society. But a major structural influence on exclusion has been the wider economy and its impact on jobs. This analysis shows that during times of stronger economic performance disparities diminished. As such approved TAYplan (2012) Policies 3, 4, 5, 6 and 7 remain essential parts of any approach to reduce exclusion from society. But analysis in this Monitoring Statement also suggests that national and international economic factors can strongly influence the health consequences of exclusion from society.

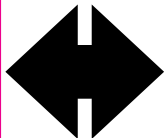
Sub-Outcome: People take up healthier and more active lifestyles

What: Healthier and more active lifestyles are the consequence of the choices people make about diet, levels of exercise, lifestyle and other factors such as smoking, alcohol intake and substance misuse. Some of these choices can be driven by the location, design and layout of development and the options and opportunities this brings.

How: Approved TAYplan (2012) Policies 1 and 2 have a role in ensuring that the location, design and layout of development enables people to undertake healthier and more active lifestyles. Policy 1 (and consequently Policies 4, 5 and 7) has a role to play in locating development in places that enable active travel and this is supported by Policies 2, 3 and 8 which help in protecting and providing infrastructure to enable this.

There is also a role in protecting and enhancing green infrastructure and connections that enable people to use the countryside, parks and other leisure and sports facilities (also covered in approved TAYplan Policies 2 and 3). However, even if these things are done how people travel and whether they use recreation space or take part in sport are matters of individual choice. The key role for TAYplan is therefore to ensure that the capability to live a healthier and more active lifestyle exists and that people are not excluded from these choices because of location, design and layout of development.

Progress towards this outcome



The majority of adults are doing less physical activity than is recommended and there has been a fall in the share of adults and children travelling to work and school by active travel modes. This is contrasted with the vast majority of primary 1 children are of a healthy weight.

Evidence elsewhere suggests that the majority of new homes have been built in principal settlements. This suggests that even though we are expected to

live longer our lifestyles are becoming less healthy based on the lifestyle choices we make after the age of primary 1. There will be places where the Strategic Development Plan and land use planning in general can enable or make easier a shift to a more active lifestyle but this will ultimately be governed by personal choices. This suggests a movement away from healthier and more lifestyles.

Percentage meeting physical activity recommendations

1.17 The physical activity figures highlight attitudes and choices towards exercise and subsequently towards active lifestyles. Tayside and Fife NHS board areas showed very similar trends to Scotland where the majority of adults were taking part in 'low physical activity' or 'some physical activity' (collectively nearly 60%). However, the proportion of men meeting the recommended levels was higher than for women in all three areas. This tells us that, whether through choice or lack of it, the majority of adults do not undertake at least the recommended level of physical activity (at least 30 minutes of moderate intensity physical activity on most days of the week). Although the location, design and layout of development in approved TAYplan (2012) policies 1 and 2 can contribute, along with factors including education and attitudes, it is ultimately personal choices that determine uptake of physical activity.

Prevalence of overweight including obesity

1.18 The proportion of adults in Scotland classed as overweight or obese (Body Mass Index (BMI) of 25 or over) was 64.6%. Significantly more men than women were overweight or obese (68.2% compared to 61.1%). This observation for men and women is contrary to the physical activity statistics and possibly suggests reasons other than low exercise levels for unhealthy BMI in men, such as poorer diet/attitude to diet. Levels of overweight and obesity in Tayside and Fife were generally higher than or similar to Scottish levels with the exception of women in Tayside, who had a lower mean BMI than the Scotland-wide figure.

Prevalence of obesity

1.19 4% of adults in Scotland had a Body Mass Index (BMI) of 30 or over, and were therefore classed as obese. There was little difference between the percentage of men and women who were obese (27.0% and 27.8% respectively). The prevalence of obesity was higher than the national average for Women in Fife (30.5%).

Choice of travel mode varies

1.20 Mode of travel choice tells us about whether people are adopting active travel (walking and cycling) as well as progress to reducing our carbon footprint. Modal choice can be influenced by the availability, cost, convenience, comfort and quality of services and facilities, the weather, distance to travel, journey purpose, perceived safety and people's attitudes. Therefore the location, design and layout of development in approved TAYplan (2012) Policies 1 and 2 are important factors but only partial contributors to people's decisions about how to travel. The Scottish Household Survey presents two modal preference indicators: Journeys to school as a measure of the proportion of children estimated to walk or cycle to school; and, Journeys to work, estimating a variety of active and passenger transport modes taken by workers.

Journeys to school by active travel vary

1.21 At Scotland level the proportion of children walking or cycling to school has shown a consistent fall from around 55% in 1999/2000 to around 50% in 2009/2010. The trend is more fluctuating in each of the TAYplan authorities. Fife reflects a similar pattern to Scotland and by the end of the decade saw smaller proportions of children walking and cycling to school than the

Scottish average. Perth & Kinross saw considerable fluctuation peaking in the middle part of the decade. Despite a subsequent drop, the proportion of children walking and cycling to school in 2009/2010 is marginally higher than in 1999/2000. However, the overall levels remain below the Scottish average and are the lowest of the four TAYplan councils. Despite seeing proportions higher than the Scottish average for much of the decade Dundee City then saw a pronounced fall in the proportion of children walking or cycling to school which was similar to the Scottish average for the end of the decade. In Angus there were significant fluctuations followed by a fall towards the end of the decade but the proportion of children walking and cycling to school was slightly higher by the end of the decade than at the start and is similar to the Scottish average.

1.22 There will be many explanations for these trends which could include car ownership, local authority transport entitlements for children and parental perceptions of safety. However, the remainder of children's journeys to school are likely to be made up of car and bus. In some areas, particularly rural areas, the distances to be covered make access by active travel all but impossible.

Journeys to work by non-car travel fluctuate

1.23 Active travel modes remained generally constant for travel to work in Scotland and the TAYplan councils despite fluctuations. The proportions using active travel to work remain above the Scottish rate for all TAYplan councils except Fife. Active travel also accounts for a higher proportion of journeys to work than passenger transport (bus and rail). In all areas the car,

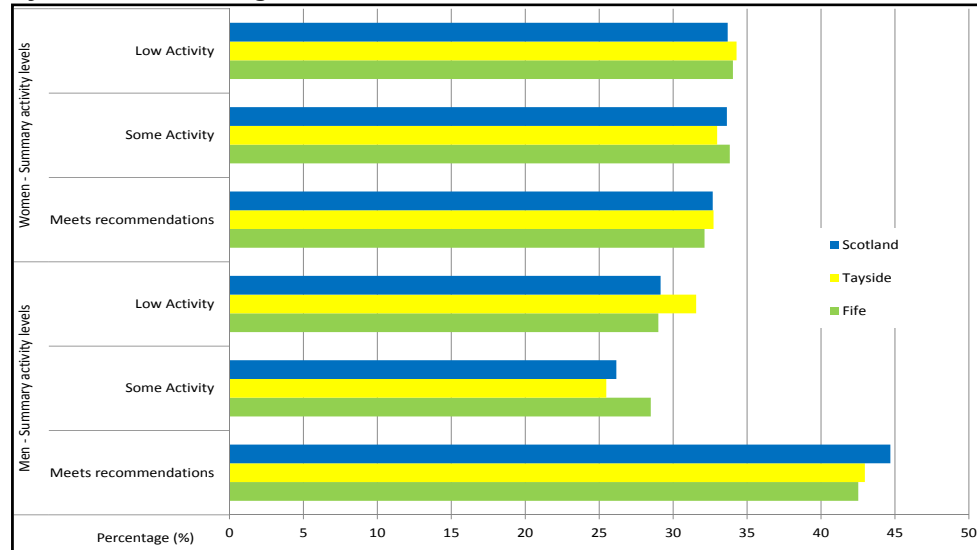
accounts for the majority of journeys to work. This coincides with growth over the last decade in the population living in areas surrounding principal settlements that are also amongst Scotland's 20% most access deprived.

1.24 Passenger transport modes are largely represented by bus travel. The limited coverage of rail makes this a less feasible mode for most journeys to work. The comparatively higher rail journeys to work are likely to be to Edinburgh which Network rail information shows to be the main destination of Fife originating rail traffic.

1.25 Dundee City has a significantly higher level of bus travel than the other areas including Scotland averages. This may be explained by a higher availability and frequency of bus services and comparatively low car ownership. The latter may also contribute to the share of journeys made by active travel. The rural character of the other three authorities may explain comparatively higher non-active and non-passenger transport journeys.

1.26 The general trend is of relatively stable, albeit fluctuating, levels of active travel but with car travel remaining dominant. From a planning perspective this suggests that although the majority of new homes were built in principal settlements the proportion of those travelling by active modes has not substantially increased. The reasons for this vary but the policy approach remains appropriate because alternative development patterns would not enable people to choose active travel so easily.

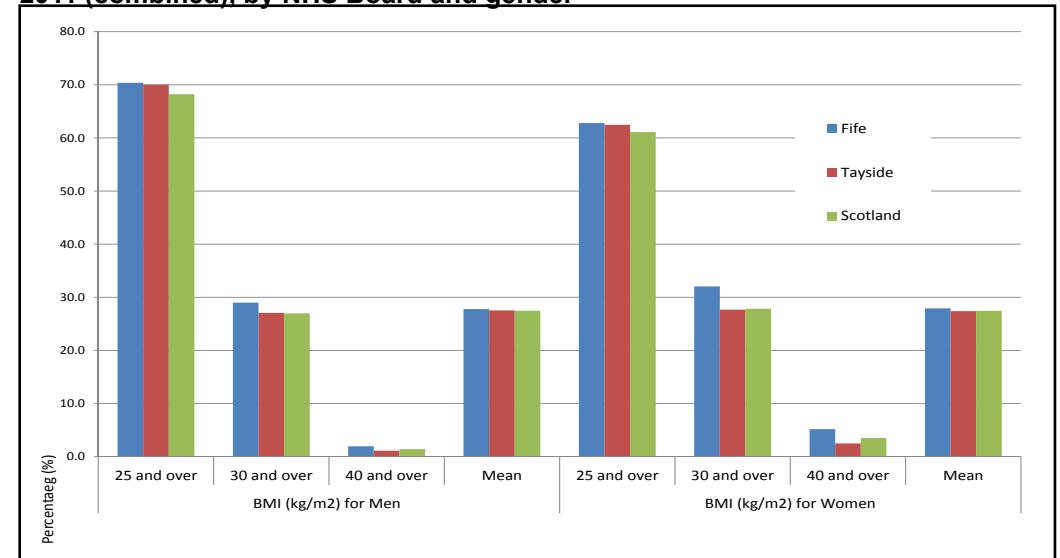
Figure 9: Adult summary activity levels, 2008, 2009, 2010, 2011 (combined), by NHS Board and gender



Source: Scottish Health Survey 2011

Note: As these are constructed from a four year average (2008, 2009, 2010, 2011), they can serve only as a baseline.

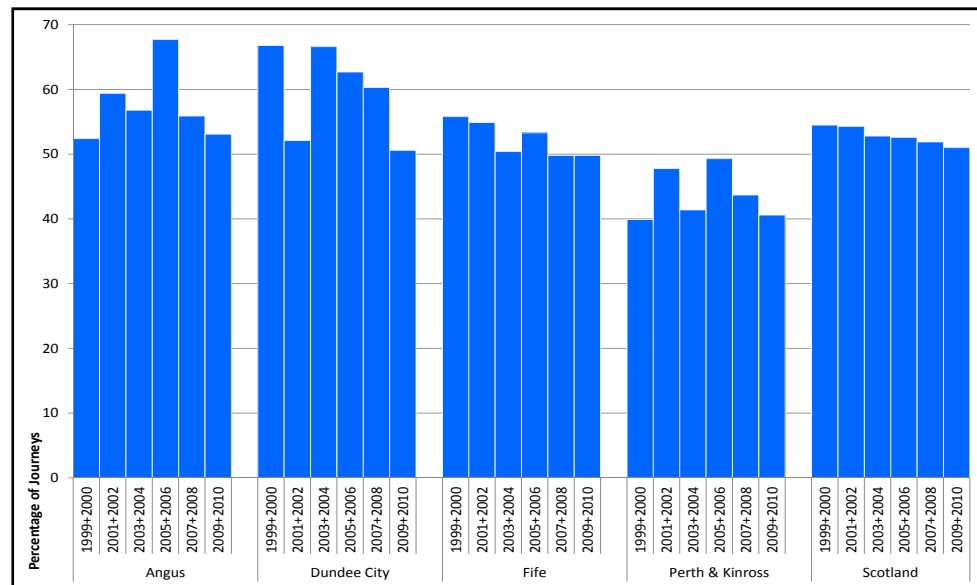
Figure 10: Mean BMI, prevalence of overweight and obesity, 2008, 2009, 2010, 2011 (combined), by NHS Board and gender



Source: Scottish Health Survey 2011

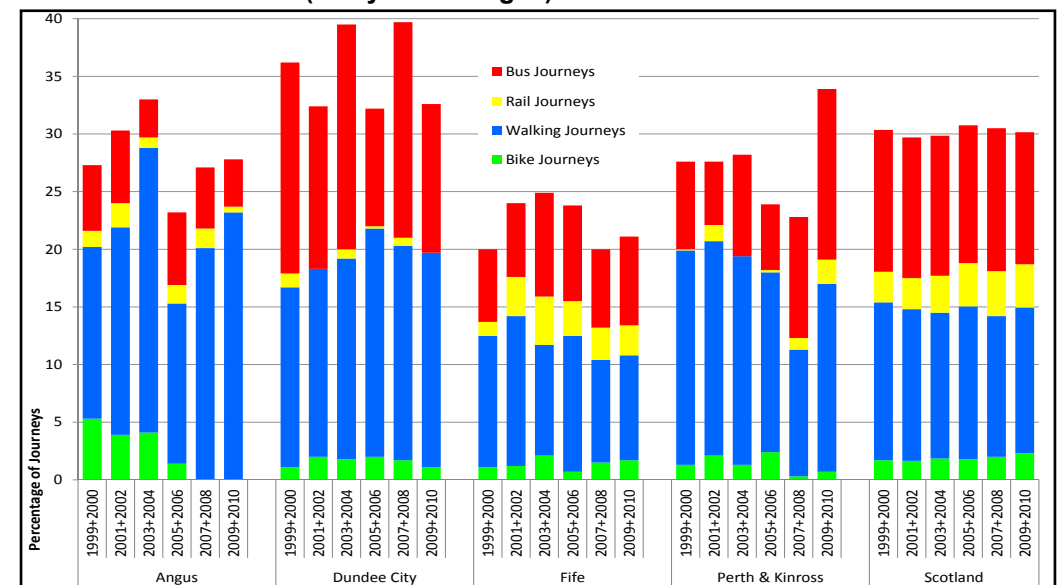
Note: As these are constructed from a four year average (2008, 2009, 2010, 2011), they can serve only as a baseline.

Figure 11: Percentage of Children walking and cycling to school (two year averages) 1999 & 2000 to 2009 & 2010



Source: Scottish Transport Statistics based on the Scottish Household Survey

Figure 12: Proportion of journeys to work made by public or active transport 1999 & 2000 to 2009 & 2010 (two year averages)



Source: Scottish Transport Statistics based on the Scottish Household Survey

Body Mass Index (BMI) of Primary 1 School Children

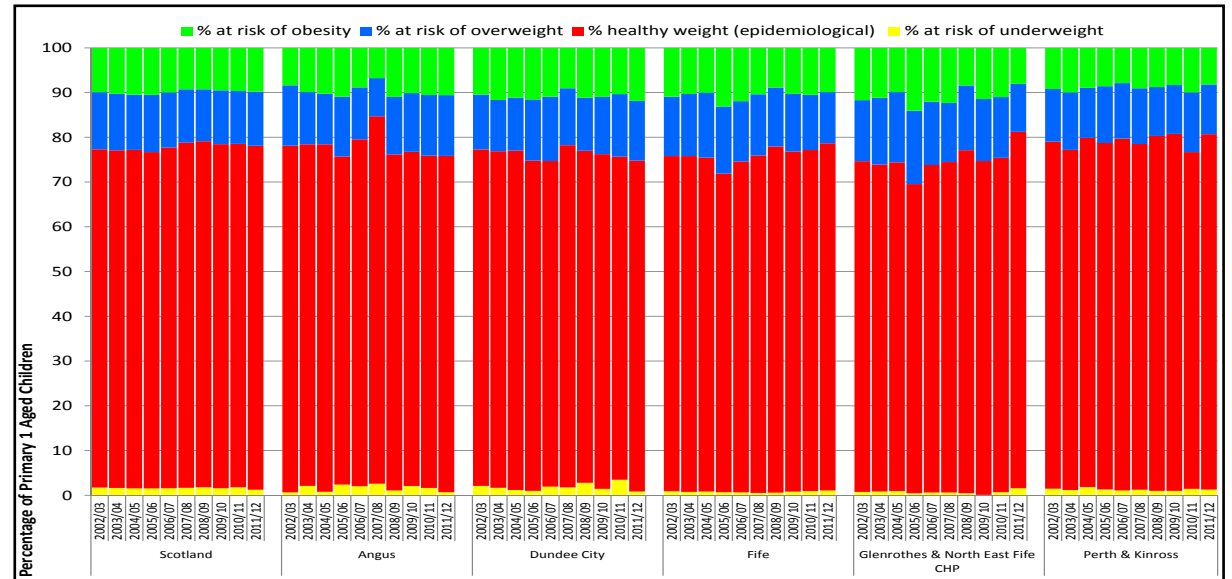
1.27 The Scottish picture is one of relative constancy, with greater degrees of fluctuation found within each authority. Glenrothes and North East Fife serves as a proxy for North Fife. The majority of Primary 1 School children are of healthy weight according to the body mass index (BMI), there is slight fluctuation within the TAYplan authorities but no discernible trend.

1.28 There are very low percentages for those at risk of being underweight, although there are still some instances in Dundee City and Angus, where levels over time have been higher than Scotland-wide figures. This could reflect some of the concentrations of health deprivation observed above, in particular the concentrations in Dundee City. At the other end of the scale, the risk of obesity appears to be slightly lower in Perth and Kinross than in the rest of Scotland and TAYplan throughout the period 2002/03–2011/12. Overall Primary 1 children at risk of being at an unhealthy weight continue to exist, but levels have been relatively static with some mild fluctuations.

1.29 There is a greater risk of Primary 1 children being underweight or overweight/obese in the most deprived quintiles. This may explain some of the slightly higher percentages of both extremes seen in Dundee City, where there are known to be concentrations of health deprivation. Despite variations, the risk of unhealthy weight amongst primary 1 children is similar across the geographies and quintiles of deprivation.

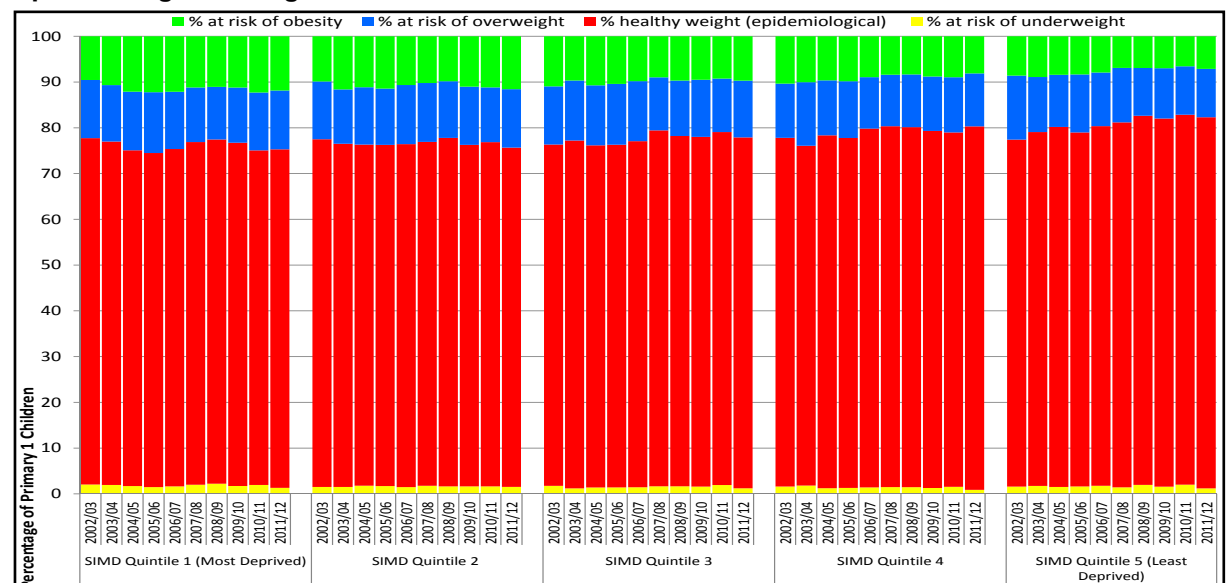
1.30 This means that the factors which drive a healthy weight e.g. diet and exercise, are not automatically guaranteed to be better in one area or another. The fact that the NHS continues to be concerned about rising levels of obesity suggests that lifestyle choices after Primary 1 are to some extent responsible for present levels of adult obesity. This reinforces the importance of educating people from a young age.

Figure 13: Comparing the Body Mass Index (BMI) of Primary 1 School Children by School Year for TAYplan Authorities and Scotland (2002/03 to 2011/12) by Epidemiological Categories



Source: NHS Scotland Information Services Division (ISD) Child Health Statistics

Figure 14: Comparing the Body Mass Index (BMI) of Primary 1 School Children by School Year (2002/03 to 2011/12) for Quintiles of the Scottish Index of Multiple Deprivation by Epidemiological Categories



Source: NHS Scotland Information Services Division Child Health Statistics and Scottish Index of Multiple Deprivation (2009)

Overall

1.32 This analysis shows that physical activity; including active travel, have either remained at similar levels or have fallen over the last decade. This has occurred despite other analysis showing that the majority of new homes have been in principal settlements, reflecting approved TAYplan (2012) Policy 1.

1.33 This suggests the strong influence of choices made by people about whether they lead active lifestyles. Approved TAYplan (2012) Policies 2 and 8 already set out requirements to improve how people can travel to enable active travel. Similarly approved TAYplan (2012) Policy 3 seeks to protect important assets; including parks and gardens; which can support people to make choices for an active lifestyle.

1.34 But rates of obesity or other health conditions are also influenced by diet, smoking, drinking and other choices that TAYplan cannot influence.

1.35 Furthermore the choices that people make about how to travel and whether to live active lifestyles are not just about whether the built environment enables them to do so. This Monitoring Statement demonstrates that people have made decisions about where to live which subsequently influence their travel choices.

1.36 Place quality has played a major role in some of these choices about where to live. At a strategic level this illustrates the locational consequences of market choices and the subsequent health implications as a result of active travel possibilities. As a result it shows the importance of approved TAYplan (2012) Policies 1, 2, 3 and 8 and that these have the appropriate emphasis and intent. But it also shows that there are wider factors that must be tackled through other types of intervention alongside the planning system.

Intermediate Outcome: Through sustainable economic growth the region's image is enhanced

Introduction

2.0 If people are to achieve a better quality of life there must be sustainable economic growth and the image of our region as a place to invest, live, work, study and visit must be enhanced. The region's image influences and is influenced by economic confidence in our area. Sustainable economic growth is lasting, resilient to adversity and sees a reduction in disparities and inequality. It is also achieved without undermining the Earth's natural systems which sustain human existence and our economy. The outcome diagram (right) and indicators table (overleaf) set out the areas being examined in this monitoring statement and the indicators being used.

Progress towards this outcome



The most significant factors affecting progress towards sustainable economic growth have been the global economy and the economic downturn experienced in the UK over the last five or more years. The credit crunch, subsequent recession and their impacts on financial markets in particular dented confidence to invest and led to a more risk averse lending culture. Although there are benefits to more cautious lending this has led to job losses, business closures and a slow down. More recently evidence is emerging that the long awaited recovery is taking hold. Evidence cited here also suggests that some of the circumstances that help to underpin sustainable economic growth are also beginning to be seen.

However, the influence of national and international economic factors suggests that, at best, progress towards sustainable economic growth has been maintained rather than significantly improved.

Outcome Flow Diagram

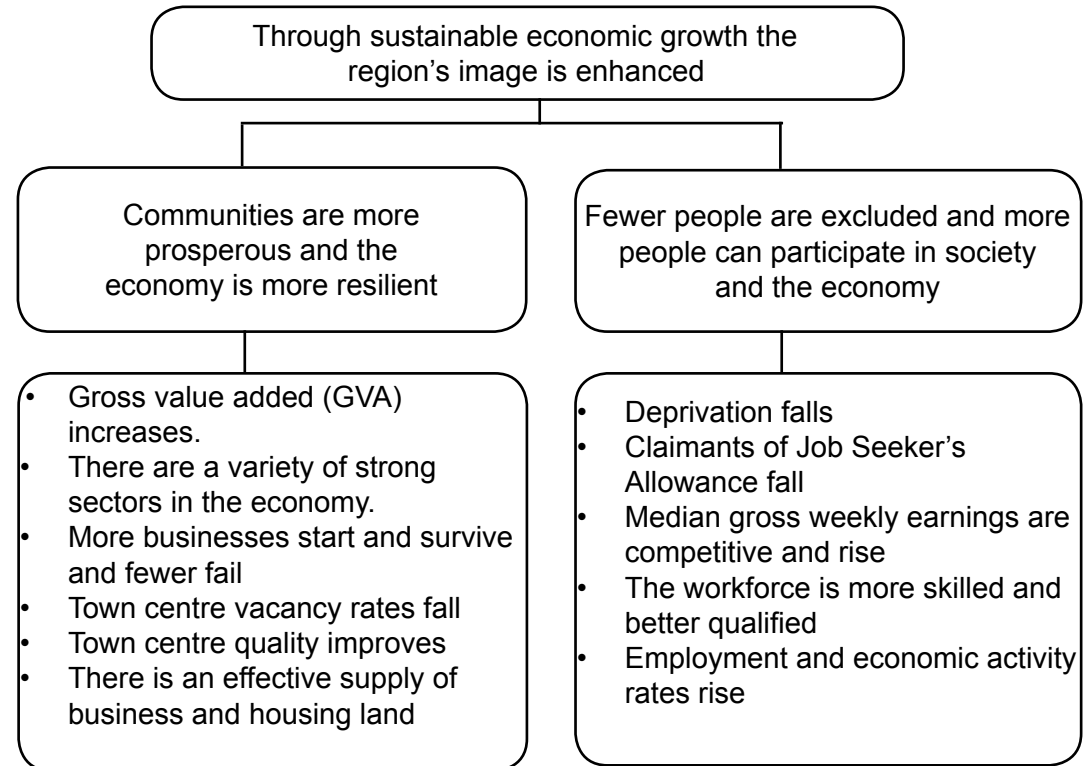


Table of Indicators

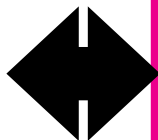
Sub-Outcome	Indicator	Source	Rationale
Communities are more prosperous and the economy is more resilient.	Change in Gross Value Added per capita.	NOMIS	These tell us about productivity rates per head.
	Business starts and deaths.		These tell us about the business environment and entrepreneurial culture.
	Business survival rates.		
	Sector growth.		This is about the sectors structure of the economy.
	House Building and effective housing land.	Council Housing Land Audits	This tells us about the effectiveness of land for business and housing.
	Employment Land take up and Effective Land Supply.	Council Employment Land Audits	
	Town Centre Vacancy.	Local Authorities	This tells us about the economy in town centres.
	Town Centre Quality.	GVA Grimley	
Fewer people are excluded and more people can participate in society and the economy.	Median Gross Weekly Earnings.	NOMIS	This tells us about changes in earnings.
	Employment Rates and Economic Activity Rates.	Scottish Local Labour Market Statistics	This tells us about people in or out of work.
	Low or no qualifications.		This is a proxy for skills.
	Deprivation.	Scottish Index of Multiple Deprivation	This tells us about relative deprivation over time.
	Job Seeker's Allowance (JSA) Claimants.	Department for Work and Pensions	This tells us about changes in unemployment.

Sub-Outcome: Communities are more prosperous and the economy is more resilient

What: Prosperous communities and a more resilient economy often see growth in productivity through gross value added to the economy and a large proportion of people working in a variety of strong sectors. There is an entrepreneurial culture with a strong business survival rate with more businesses starting and fewer failing. There is also a supply of effective employment and housing land and town centres improve and vacancy rates fall. Performance is sometimes governed by local decisions and successes but it is also heavily influenced by macro-economic policy and the national and global economy.

How: The Approved TAYplan (2012) promotes sustainable economic growth and an enhanced regional image by making land available for homes and businesses (Policies 4 and 5) and supporting infrastructure provision (Proposals map 1). It also has an important role in shaping the quality of places for people to live and work (Policy 2) and protecting and enhancing assets which support sustainable economic growth (Policy 3). This is therefore about both the provision of space to undertake business as well as supporting the lives of the workforce.

Progress towards this outcome



The most significant influence on the economic performance of the TAYplan area has been the global economic slowdown of the last 6 years. As with other parts of the UK, GVA per capita fell, the number of business deaths grew and business starts fell. Nevertheless there are sectors of the economy with potential to grow and these are recognised by the approved TAYplan (2012) Policies 3 and 4. An effective land supply is available for homes and business and there are available premises in town centres.

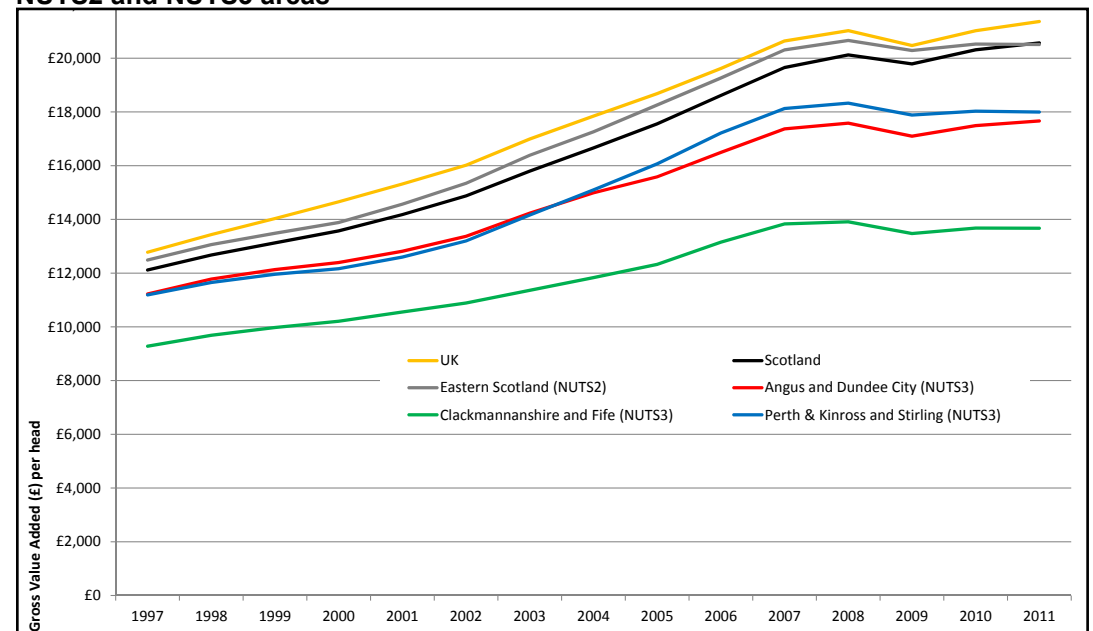
But the TAYplan area is part of a national and a global economy and so local and collective improvements together will be to the benefit of this area. This suggests that the approach of the approved TAYplan (2012) continues to be appropriate but the fiscal context remains challenging, albeit with an economic recovery taking hold.

Gross Value Added (GVA) to the economy grows then steadies

2.1 Gross Value Added (GVA) per capita measures the change in total economic output per head of population. It is a useful way to assess the economic health and wealth of areas. GVA assesses the relative value or productivity of businesses. The NUTS3 regions are the closest proxy for council areas within TAYplan as GVA information has not been released below this geographical level.

2.2 Within these areas, and Scotland as a whole, GVA (£) per head rose steadily from 1997 but then fell after the 2007 credit crunch and during the subsequent recession. These macro-economic circumstances are seen across each of the geographies shown; however the recovery in GVA is occurring differently in different localities. Scotland as a whole appears to have had a stronger recovery in GVA than Eastern Scotland (which covers TAYplan), albeit from a lower base. GVA is also consistently lower per capita for all NUTS3 areas covering TAYplan than it is for Eastern Scotland, Scotland and the UK. GVA growth per head in Angus and Dundee City has grown over the most recent three years compared with flatter trajectories for the both *Clackmannanshire and Fife*, and, *Perth & Kinross and Stirling*.

Figure 14: Changes in Gross Value Added Per Capita 1997-2011 for UK, NUTS1, NUTS2 and NUTS3 areas



Source: NOMIS

Fall in new business starts and growth in business deaths

2.3 Business deaths were generally falling from 2005 to 2007 but began to increase from 2008 and particularly in 2009 and 2010. These trends were mirrored by an increase in business starts to 2007 followed by a fall thereafter (Figure 15). This coincides with the credit crunch and subsequent recession. Business starts and deaths are each higher in Perth & Kinross are higher than the other local authorities and the Scotland average. This may be a reflection of the relatively higher levels of self-employed people in Perth & Kinross.

2.4 The Business Survival Rate (Figure 16) is a useful measure of the success, longevity and sustainability of businesses in an area. Survival is measured against a 3 year period from registration. However, the available information for Business survival rate runs only to 2007, therefore pre-dating the credit crunch and recent economic downturn. Up until 2007 Perth & Kinross, Angus and Fife all experienced survival rates reaching above or similar to the Scottish average by 2007. Both Dundee City and Perth & Kinross saw falling survival rates over the period (2002–07). Survival rates increased in Fife, Angus and Scotland over the same period.

Figure 15: Business Starts and Business Deaths (2004-10)

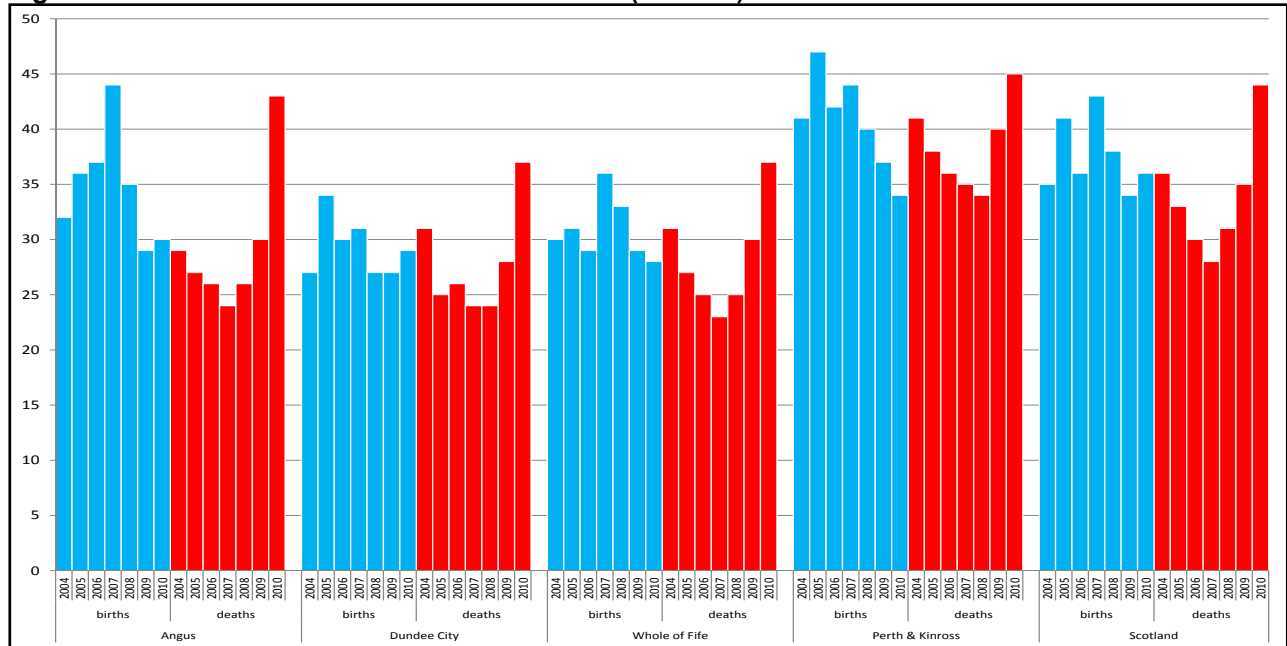
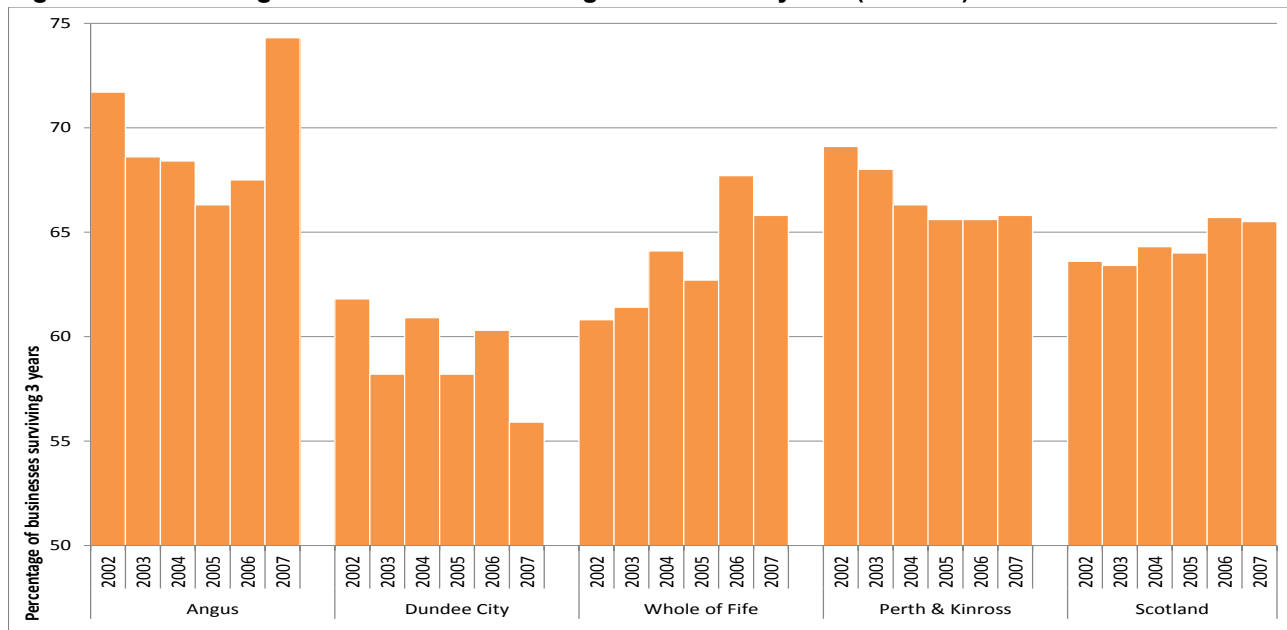


Figure 16: Percentage of businesses surviving at least three years (2002-07)



Source: Business Demography from Office for National Statistics

Employment by sectors fluctuates

2.5 The proportion of people in employment by sector (Figure 17) shows the significance of particular sectors of the region's economy and how this changes over time. It is based on where people live rather than where they work. As a proportional measure it only shows those who are employed and excludes those who are not. As such more recent trends of lower employment rates will only be reflected here if a particular sector has been affected in a proportionally more significant way than another. Where the figures do not add to 100% this represents the absence of data on a particular sector.

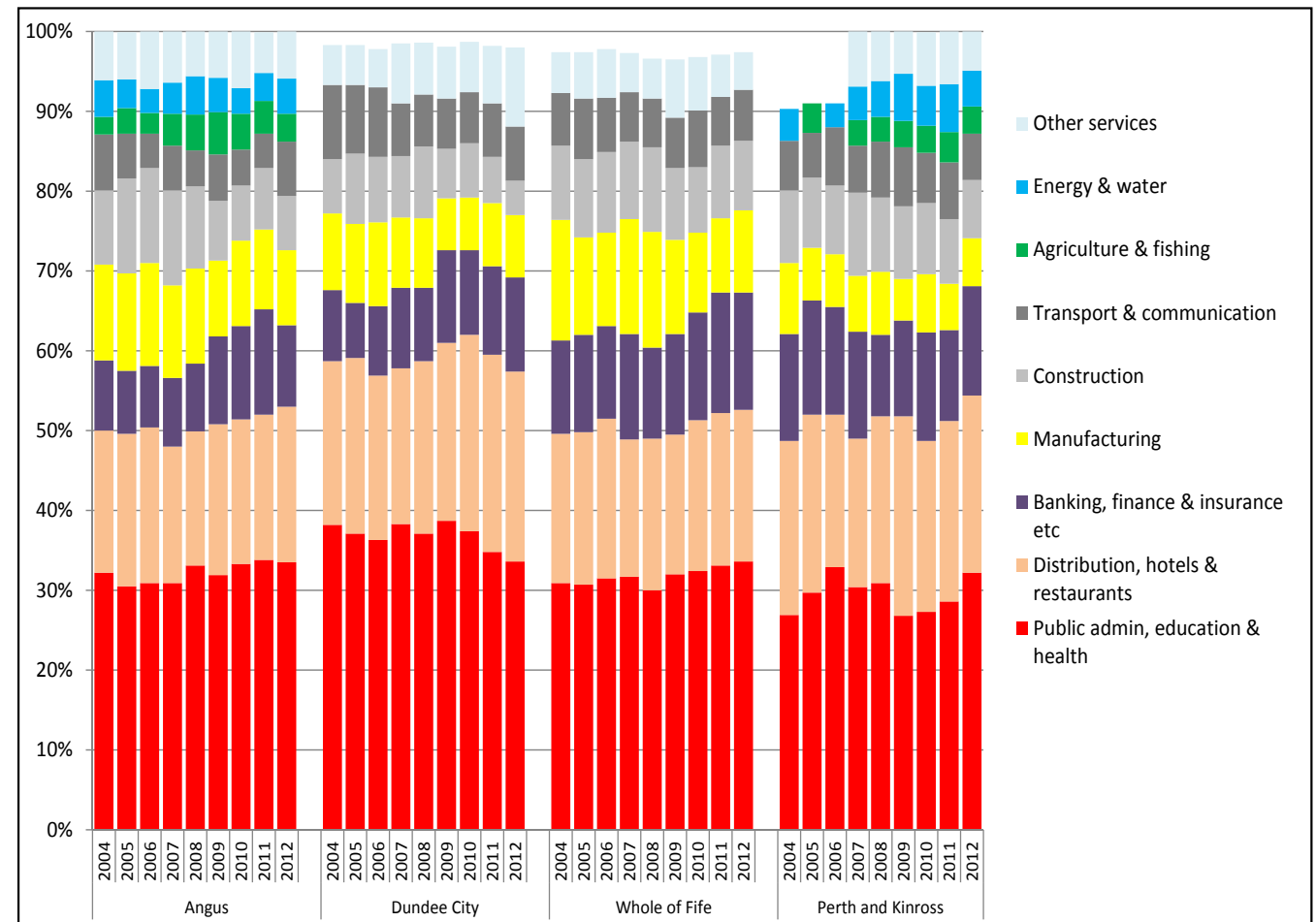
2.6 In all four council areas 'Public Administration, Education and Health' represent just over one third of employment over time. This category represents the majority of the public sector including council workers, teachers, National Health Service staff, and police and fire services. But it excludes defence and publically owned/run transport, utilities, banks and distribution. Although the majority of jobs are not in this sector it continues to be the most significant individual sector of the economy. Despite a fall from 40% to 30% of employment in 'Public Administration, Education and Health' for Dundee City the proportions in this sector grew for the other three authorities. The fall in the proportion in Dundee City is likely to have resulted from both austerity measures, felt across the whole public sector, and house moves of public sector workers out of Dundee City. The growth in the other three council areas is also unlikely to have resulted from growth in the number of jobs and instead it is more likely to reflect contraction in other sectors and house moves into these council areas from e.g. Dundee

City in particular.

2.7 'Distribution, Hotels and Restaurants' continue to be the second most significant sector for jobs across the TAYplan authorities. Although the proportions vary from area to area this represents between 20% and 25% of jobs consistently over time.

2.8 Both 'Manufacturing' and 'Construction' each appear to have contracted proportionally as jobs sectors. Given the slowdown in the construction sector as a whole and some of the challenges facing parts of the manufacturing sector it is reasonable to assume that these sectors are amongst those which have seen job losses.

Figure 17: Changes in employment sector as a proportion of all jobs in the economy (2004 to 2012)



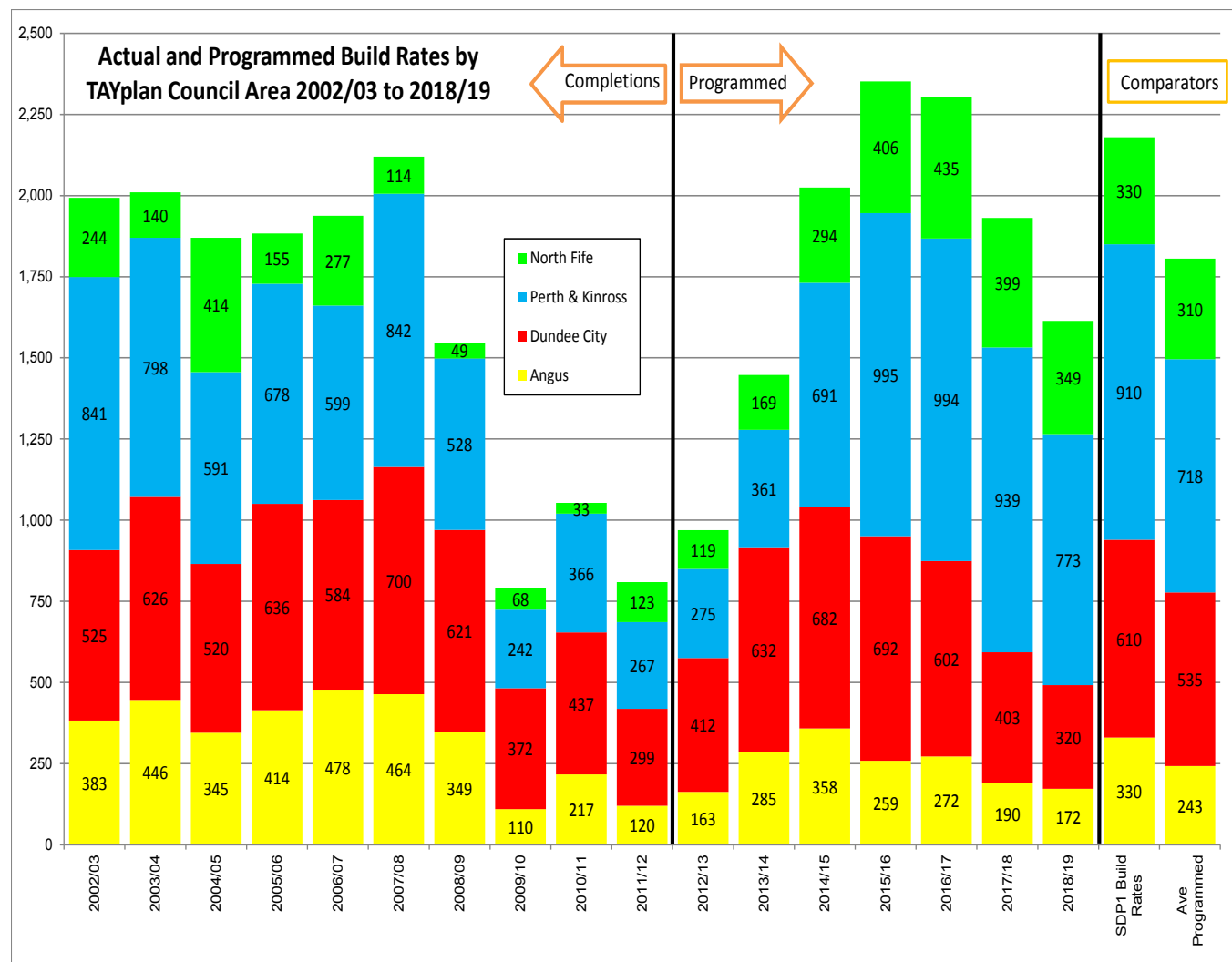
Source: Scottish Local Labour Market Statistics (NOMIS)

House building rates have fallen but effective land supply is capable of delivering planned output

2.9 House building rates (Figure 18) were comparatively higher during the housing boom (2002/03 to 2007/08) which coincided with a time of liberal money lending that enabled builders and purchasers to access finance to build and buy homes respectively with comparative ease. Build rates peaked at over 2,000 homes in 2007/08. Following the credit crunch of 2007 and the later recession build rates fell markedly in all areas, and in some cases more than halved. This reflects the more challenging environment for the building industry who are reliant on credit to build and for their customers to obtain loans and mortgages. It also means that recent build rates fall short of the annual build rates planned in the approved TAYplan (2012) Policy 5.

2.10 Local Development Plans are identifying sufficient effective housing land to meet the planned build rates set out in Policy 5. However, the most recent Council Housing Land Audits (as at March 2012) suggest programmed (or anticipated) build rates for the next 7 years could recover to, in some instances, pre-recession levels. But the anticipated build rates for this 7 year period average below planned levels in approved TAYplan (2012) Policy 5. This illustrates the important influence of wider economic factors that affect confidence within the financial markets and these will determine the actual speed of take up. Figure 5 also indicates the significant scale of transition required from present build rates to those planned in the approved TAYplan (2012) Policy 5.

Figure 18: House building rates in local authority areas within the TAYplan region (2002/03 to 2011/12) and anticipated (programmed) completions (2012/13 to 2018/19) compared with planned build rates in approved TAYplan (2012) Policy 5 (2012-32)



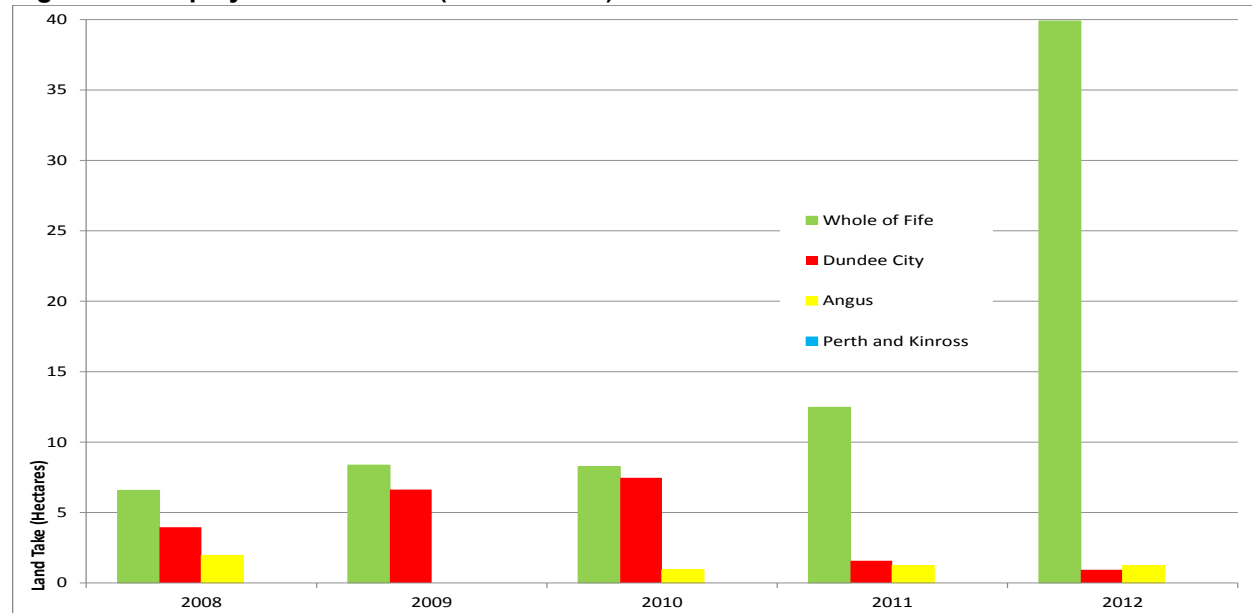
Source: Council Housing Land Audits as at March 2012
 Note: 'SDP1 Build Rate' refers to the average yearly build rates (2012-24) set out in the approved TAYplan (2012) Policy 5. 'Ave Programmed' refers to the average annual programmed build rate based on effective land supply and assumed build rates set out in council housing land audits 2012 for the years 2012/13 to 2018/19. Completions 2002/03 to 2011/12 and programmed build rates 2012/13 to 2018/19 exclude sites of fewer than 5 homes, as per council housing land audits.

Employment land take up falls and effective employment land remains constant

2.11 Employment land take up (Figure 19) continued to increase in Dundee City and in the whole of Fife until 2010 and 2011 respectively. It fell in Dundee City after 2011. It is not clear if this is a longer term trend of a single year drop.

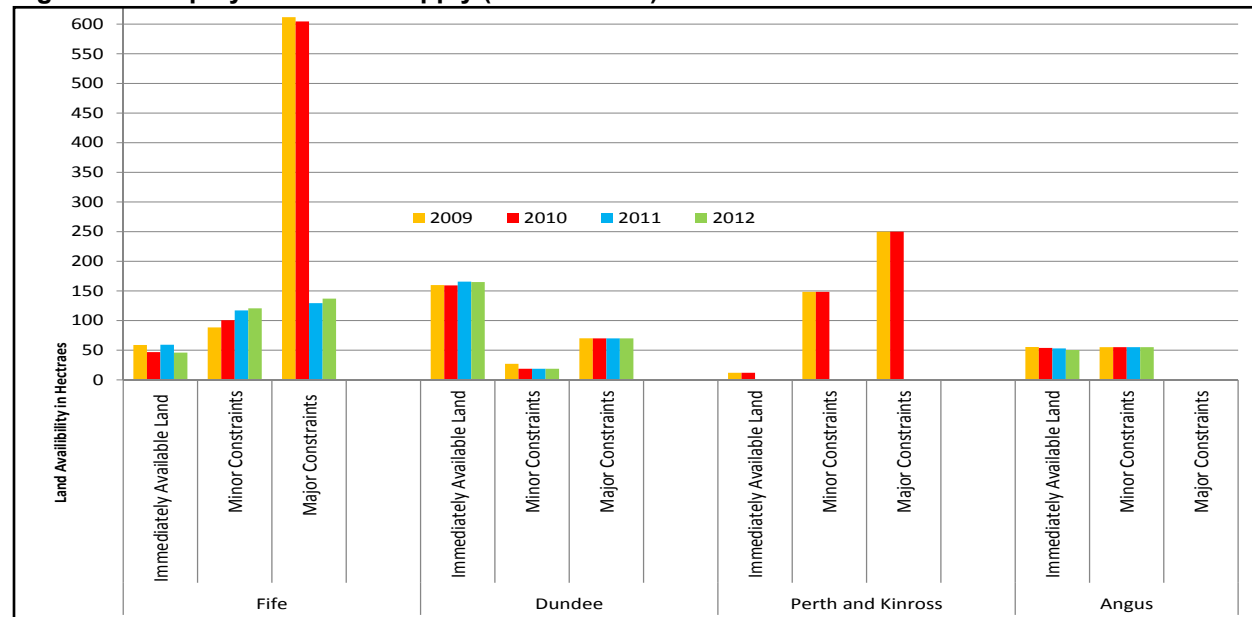
2.12 In Angus, Dundee City and the Whole of Fife there continues to be a large proportion of the employment land supply that is either 'immediately available' or has 'minor constraints' (Figure 20). In Perth & Kinross the most recent position (2010) showed that 'immediately available' land represented a substantial minority of all employment land. However, since that time Perth & Kinross has been preparing a new Local Development Plan.

Figure 19: Employment land take (2008 to 2012)



Note: Figures not available for Perth & Kinross (2008 to 2012) and Fife (2012)

Figure 20: Employment Land Supply (2009 to 2012)



Source: Council Employment Land Audits

Note: Figures not available for Perth & Kinross (2011 and 2012)

2.13 The town centres rankings (Figure 21) are compiled by GVA Grimley each year using a series of criteria. The highest scoring town centre is ranked number 1; therefore the lower the score on the graph the higher the town centre has performed in the rankings. Dundee and Perth have both seen improvements in their ranking over time, which suggests they have outperformed other UK town centres. Dundee consistently ranks fourth highest of the Scottish city centres and has improved its ranking overall. Perth is seventh out of the Scottish city centres but has consistently climbed the ranks to be closer to other Scottish city centres. This suggests a positive performance for town centre quality over the 2009 to 2011

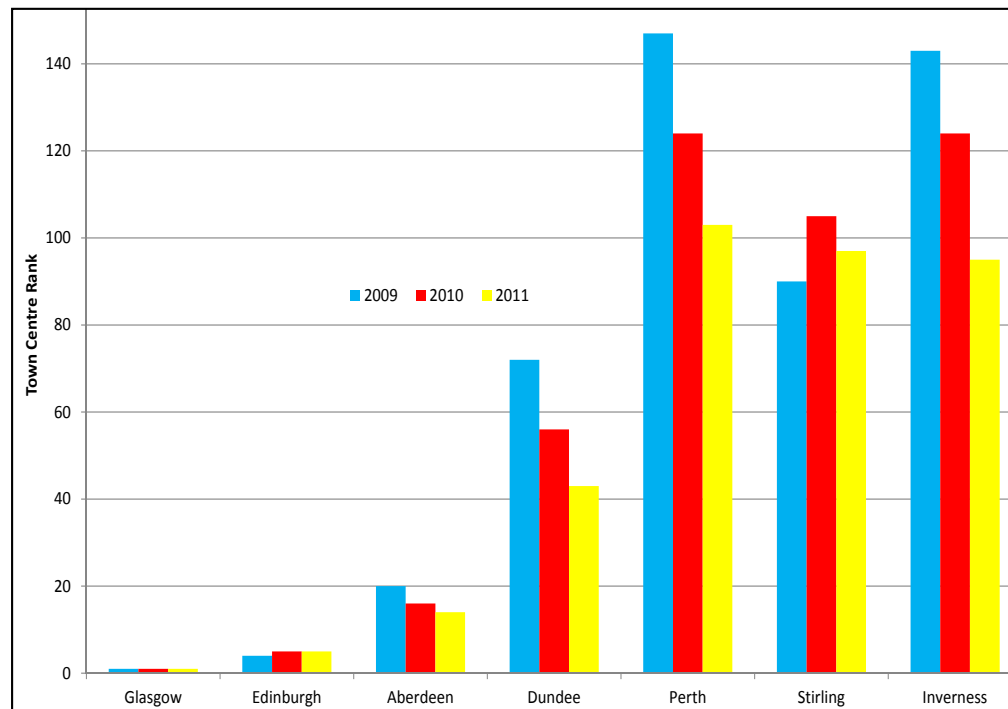
period for Dundee and Perth based on the criteria in this ranking system.

2.14 Town Centre floor space vacancy rates (Figure 22) help us to understand the level of flexibility of space and also the state of the economy in town centres. The vacancy rates measured are for retail and other commercial space which includes things like banks, betting offices, travel agents, pubs, restaurants, other leisure, post offices, takeaways, hairdressers, laundrettes, offices, and professionals, personal and public services.

2.15 Vacancy rates have fluctuated. Each town

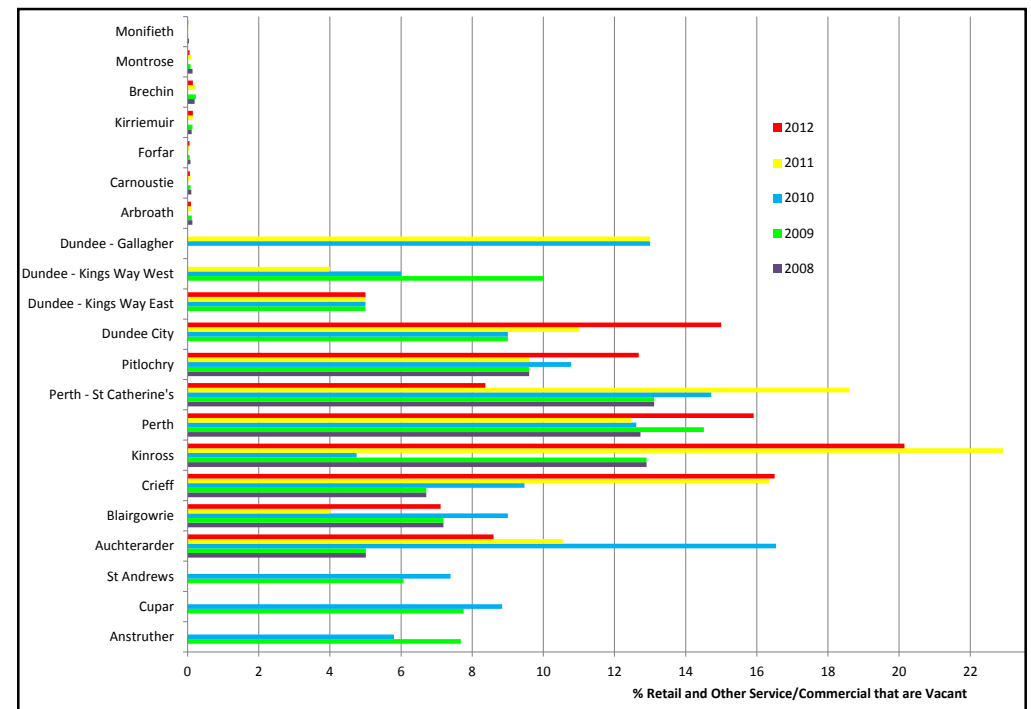
centre is different and the reuse or vacating of a small number of large units eg when a national retailer has 'gone bust', may disproportionately affect the vacancy rates, particularly in small town centres. Floor space vacancy peaked in many town centres in 2011 and 2012; but this is not universal. The highest vacancy rates have consistently been in Perth & Kinross town centres. Both Perth and Dundee City Centres have seen vacancy rates grow but Dundee and Perth retail parks have seen a drop in vacancy. The lowest vacancy rates are consistently in Angus town centres. In town centres in North Fife vacancy rates have remained around 6 to 8% for the years surveyed.

Figure 21: Town Centre Rankings (2009 to 2011)



Source: GVA Grimley

Figure 22: Town Centre Floor Space Vacancy Rates (2008 to 2012)



Source: Local Authorities including via Experian

Note: PKC studies took place annually in September and Fife studies took place in October. Fife figures unavailable for 2008, 2011 and 2012; Angus Figures unavailable for 2010

Overall

2.16 Collectively this shows that communities became more prosperous over the last decade, albeit with continued recognition of socio-economic disparities. However, whether it is business start ups and survival rates or house building and employment land take up; it is clear that the UK economy and that of the TAYplan area was not resilient to the post 2007 credit crunch and the subsequent recession.

2.17 These observations are not unique to the TAYplan region and have been measured to greater or lesser degrees in other parts of the UK and elsewhere. The global economic downturn, its subsequent impact on job availability and job security, personal spending and credit availability have all contributed to inhibit the pace of development.

2.18 The approved TAYplan (2012) continues to provide a clear policy framework for its users. Policy 4 identifies specific strategic development areas, Policy 5 provides clarity over the scale of housing land required and the appropriate flexibilities and Policy contains the appropriate decision making framework for town centre development. But a change to the fundamental economic context is needed to bring about investor confidence. The certainty provided by these TAYplan policies can help to support that confidence.

2.19 But for communities to become more prosperous and for the economy to become more resilient there must also be a variety of strong sectors, appropriate training and skills, and, there must be a market. The policy framework of the

approved TAYplan (2012) continues to be appropriate to support prosperity with an 'open for business' ethos. But the pace of development and investment in jobs will only be forthcoming if there is also investor confidence and credit availability.

2.20 These trends have also been identified in the *TAYplan Economic Outlook (2013)* prepared for TAYplan by Oxford Economics. In particular this study recognises that there is potential for the economy to grow in the future, particularly recognising the role of business services, tourism and the emerging potential of offshore energy. However, it also recognises the likelihood of government austerity measures. The study anticipates a growth in the number of jobs over the next two decades but this is not expected to reach the peak levels seen prior to the economic downturn.

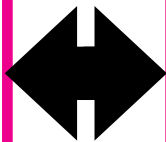
2.21 The *Strategic Review of Town Centres and Retailing in the TAYplan area* (November 2013) was prepared for TAYplan by Roderick MacLean Associates Ltd. This considers the factors described on page 24 (opposite) along with the conclusions from the *Scottish Town Centres Review (2013)* and other information. This provides a series of recommendations intended to assist in bringing about more vibrant town and city centres. Some of these responses relate directly to the planning system. For example the town centres first approach to high footfall land uses. Others recognise the important role of partnership working.

Sub-Outcome: Fewer people are excluded and more people can participate in society and the economy

What: Sustainable Economic Development is about a more equitable economy where more people can participate in and benefit from the economy. In a market economy, such as the UK, life experience and choices are heavily driven by access to finance as well as physical access to goods and services. A strong economy with more jobs and fewer disparities can contribute to increasing employment, reducing reliance on state benefits and reducing deprivation. This can contribute to improving health and wellbeing as well as knock on advantages of increased spending power.

How: The approved TAYplan (2012) has a role to play in supporting business through the provision of land and infrastructure (as covered above). This in turn plays an important role in opening up opportunities for employment. Similarly physical as well as economic regeneration can improve people's living environments and life experiences which can contribute to enhancing the region's image. Other important factors such as pay and skills are not within the remit of planning but play an important role in reducing exclusion and improving participation.

Progress towards this outcome



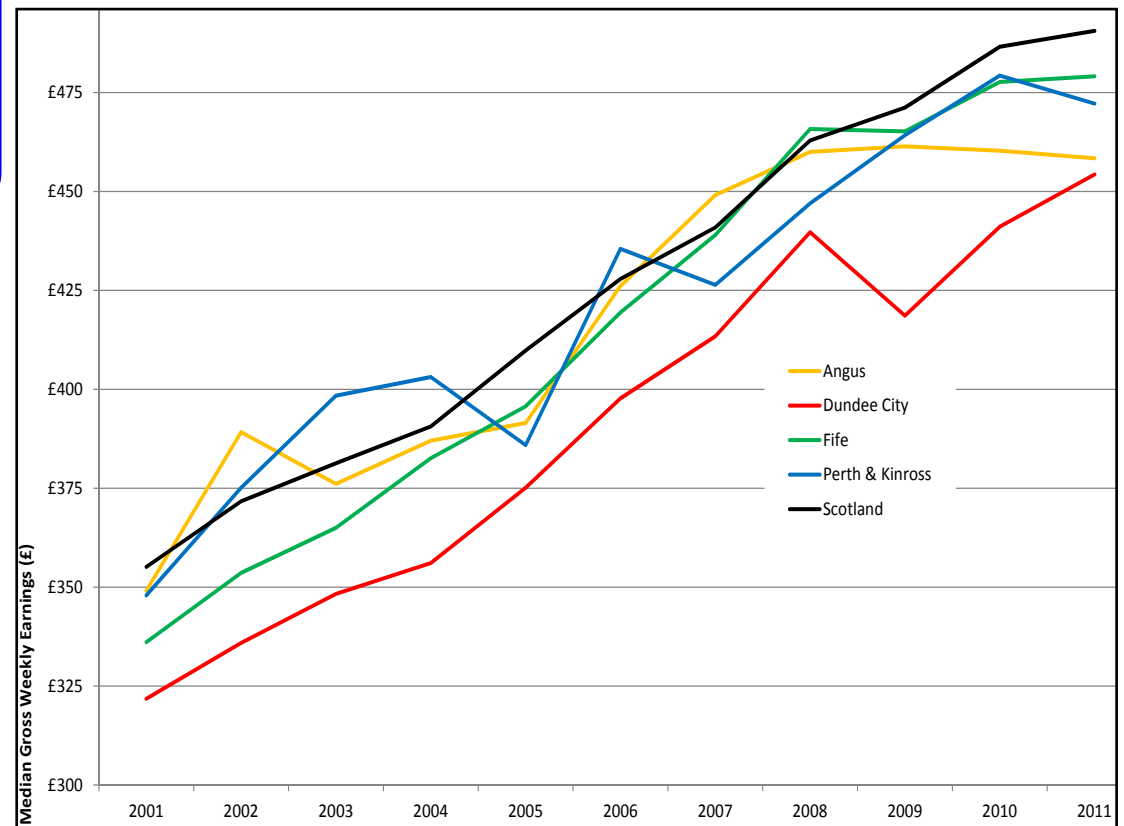
The global economic downturn has contributed to some of the changes that have led to job losses and increased exclusion. However, not all job losses and economic changes can be blamed on this as the role of technology has also been significant in changing the business environment. There have also been historic rates of comparatively high number of people with low or no qualifications, albeit with a more recent drop. Therefore numerous broader factors have influenced economic participation. Similarly numerous factors will also be responsible for alleviating it. The supply of business land, premises, the infrastructure and place quality are all covered through the approved TAYplan (2012) but training, marketing and funding will also play a fundamental role. The approved TAYplan (2012) approach to land, infrastructure and place quality will continue to play an important role in future.

Growth in average earnings slows

2.22 Figure 23 shows the median gross weekly earnings of full time employees based on where they live. Despite fluctuations all TAYplan authorities saw growth in median gross weekly incomes between 2001 and 2011, but these were generally lower than the Scottish median. Dundee City saw the lowest median gross weekly incomes of the four authorities. However, all authorities have continued to see some growth in median

gross weekly income since 2008 (accepting fluctuations) with the exception of Angus. In Angus median gross weekly earnings have remained generally static and even fallen slightly since 2008. This may reflect the wider phenomenon of lower wage inflation. It may also be that the public sector pay freeze, representing at least one third of employment across TAYplan, could have made a significant contribution to this.

Figure 23: Median Gross Weekly Earnings for TAYplan Councils and Scotland (2001-11)



Source: NOMIS

Employment rates are recovering and Economic Inactivity has grown

2.23 Employment and economic inactivity rates cover the proportion of working age people (aged 16 to 64) who are in employment or who are not economically active, respectively.

2.24 Employment rates fell across all TAYplan areas and Scotland from 2007 reflecting impacts of the credit crunch and subsequent recession. Dundee City consistently experienced the lowest employment rates and is the only TAYplan authority with employment rates lower than the Scotland average. Dundee City also experienced a significant drop in employment rates after 2010/11. Employment rates increased in Angus and Perth & Kinross in the most recent year and did so more

markedly than the Scottish average. This suggests that more people have found work although it is not apparent what specific sectors of the economy or types of jobs have brought this about.

2.25 All of the TAYplan areas except for Dundee City experienced economic inactivity rates below the Scottish average. Almost 30% of Dundee City's population aged 16-64 is classed as economically inactive; the highest levels in the region. All areas have experienced growing inactivity except for Perth and Kinross. Angus and Fife each saw continuity between 2010 and 2012. Dundee City had a considerable rise from October 2010 - September 2011 to October 2011 - September 2012.

2.26 The growth in economic inactivity can be explained by several factors. Firstly employment rates have fallen as more people have been made out of work when businesses have down-sized or closed. Secondly there has been a growth in the number of economically inactive people aged 16-64 who are retired. This could be explained by early retirements through public sector voluntary severance schemes that have occurred around this time. In each council area students and retired represent about 50% of the economically inactive. In Dundee City students represent about 27%. Those on longer term sick have increased from 2011 to 2012 in all authorities except Fife.

Figure 24: Employment Rates amongst 16-64 age group in Scotland and TAYplan authorities (Oct 2006/Sept2007 to Oct2011/Sept2012)

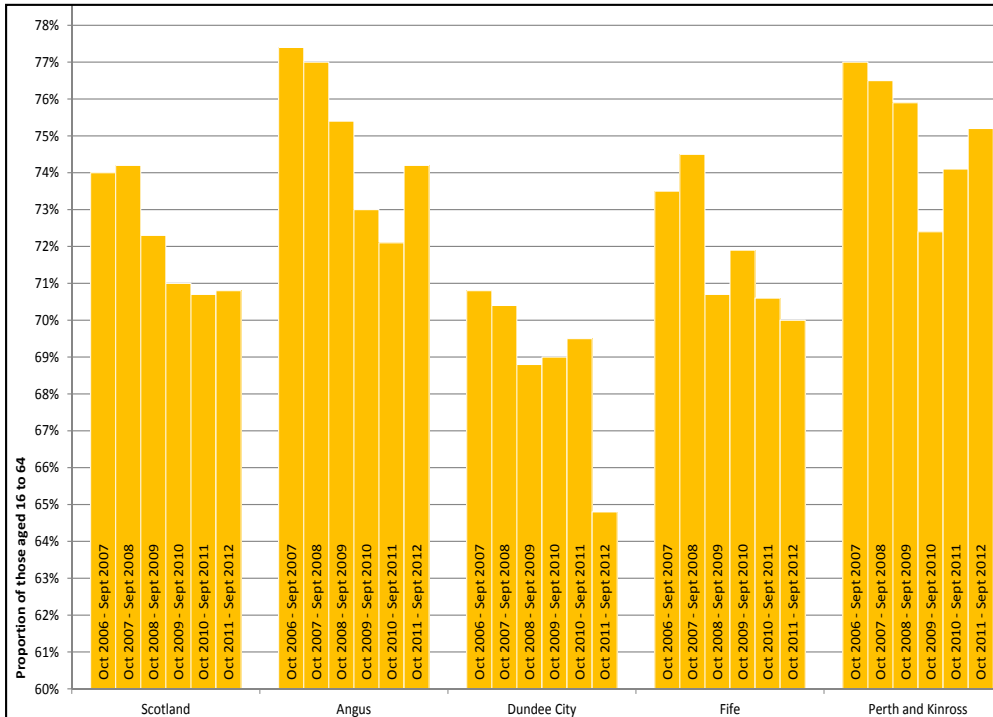
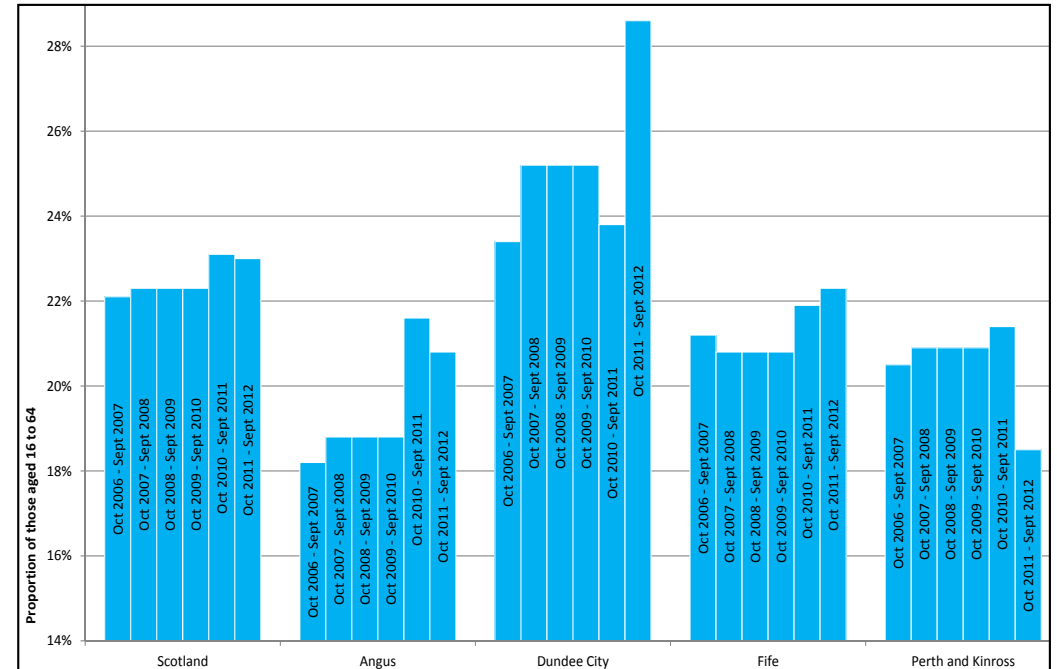


Figure 25: Economic inactivity amongst 16-64 age group in Scotland and TAYplan authorities (Oct 2006/Sept2007 to Oct2011/Sept2012)

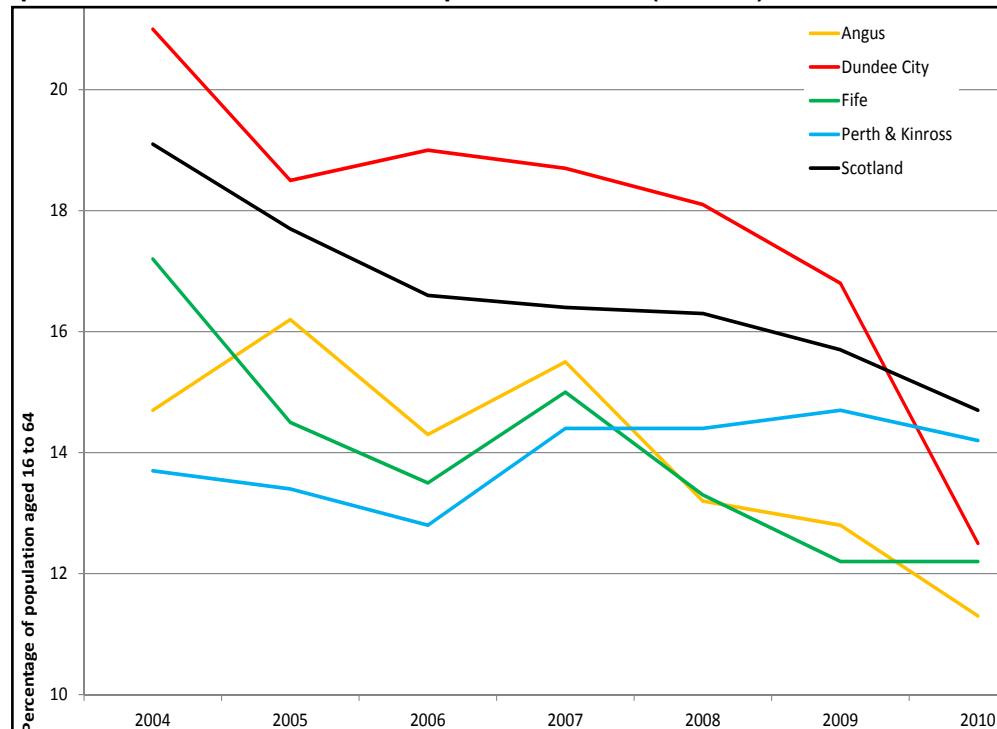


Source: Scottish Local Labour Market Statistics (from NOMIS)

Fall in people with low or no qualifications

2.27 Scotland and all TAYplan council areas except for Perth & Kinross saw numbers of people with low or no qualifications fall. In Perth & Kinross levels fluctuated around 14% (Figure 26). The proportion of the working age population (aged 16 to 64) with low or no qualifications was lower than Scotland levels for all TAYplan councils except for Dundee City up to 2010. However, Dundee City has seen the most significant transition from 2004 when it exceeded the Scottish average to 2010 when it had fallen well below this. Fife and Angus also saw a notable but less marked falls. By 2010, Angus, the whole of Fife and Dundee City each saw under 13% of their working age populations with low or no qualifications. This may be explained by a mixture of teaching improvements as well as more targeted further education and post-school activity around skills and training. This is a significant contribution towards a more skilled workforce which will contribute to the competitiveness of the area as a whole.

Figure 26: Percentage of the 16-64 aged population with low or no qualifications in Scotland and TAYplan authorities (2004-10)



Source: Scottish Local Labour Market Statistics (from NOMIS)

Fall in the population living in data zones ranked amongst Scotland's 20% most deprived.

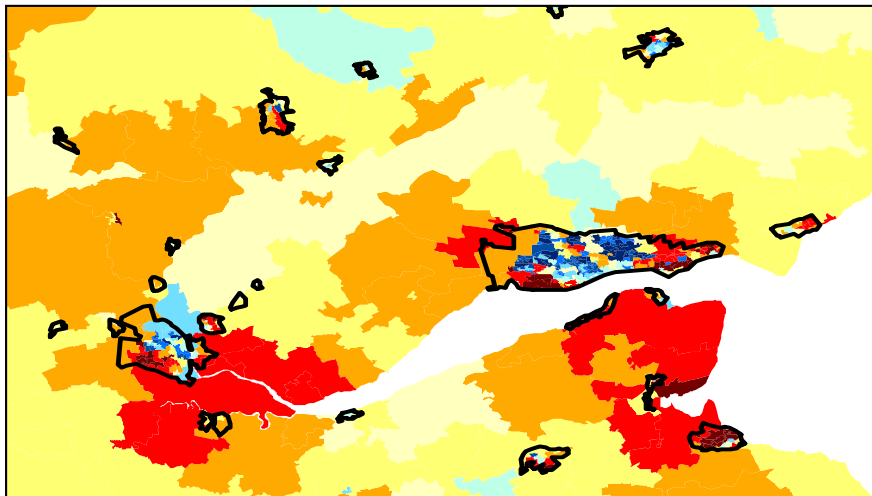
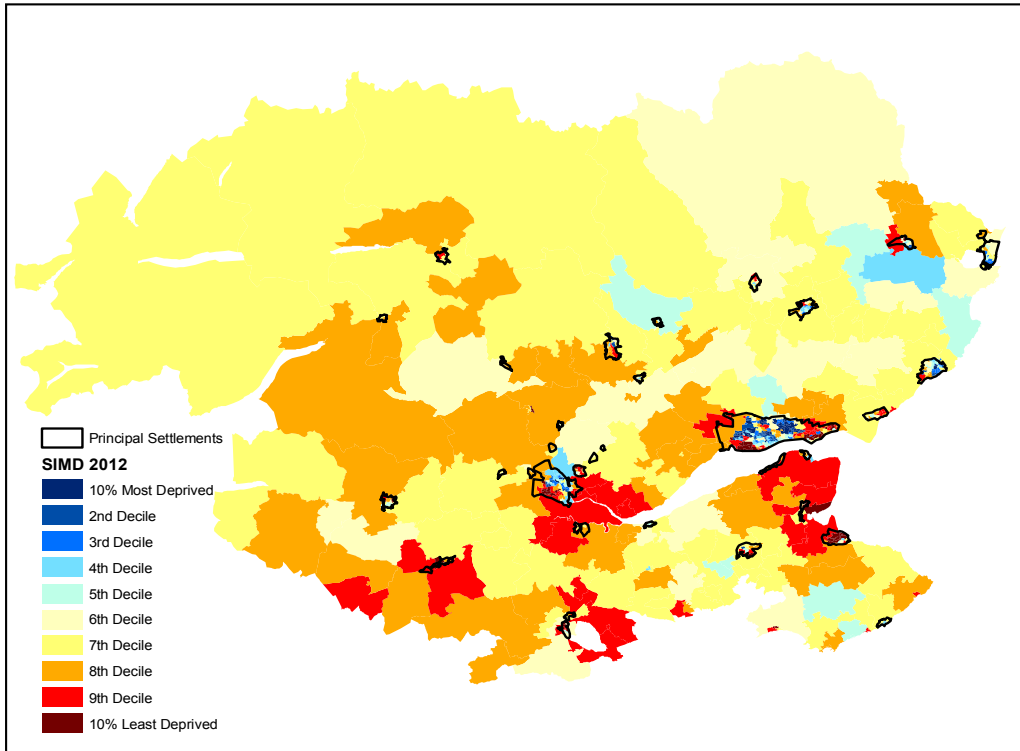
2.28 The Scottish Index of Multiple Deprivation (SIMD) 2012 combines 38 indicators across 7 domains (income, employment, health, education, skills and training, housing, geographic access and crime). The overall index is a weighted sum of the seven domain scores. The weighting for each domain is based on the relative importance of the domain in measuring multiple deprivation, the robustness of the data and the time lag between data collection and the production of the SIMD. Each area is then ranked by score.

2.29 Data zones within TAYplan ranked amongst Scotland's 20% most deprived are concentrated within the Principal Settlements, with the largest concentrations being in Dundee, Perth and Arbroath (Figures 27 and 28). Conversely data zones within TAYplan ranked amongst Scotland's 20% least deprived are primarily out-with the Principal settlements or limited to specific neighbourhoods within them (Figures 28). North East Fife has a low level of deprivation, with St. Andrews being one of the few Principal settlements largely composed of data zones ranked amongst Scotland's 20% least deprived. Much of the area surrounding Perth and Dundee, the two largest settlements, are amongst Scotland's 20% Least Deprived.

2.30 There is some consistency between the higher levels of economic inactivity (above) and the significant concentrations of data zones ranked amongst Scotland's 20% most deprived in Dundee City. This reinforces the link between employment, economic prosperity and deprivation.

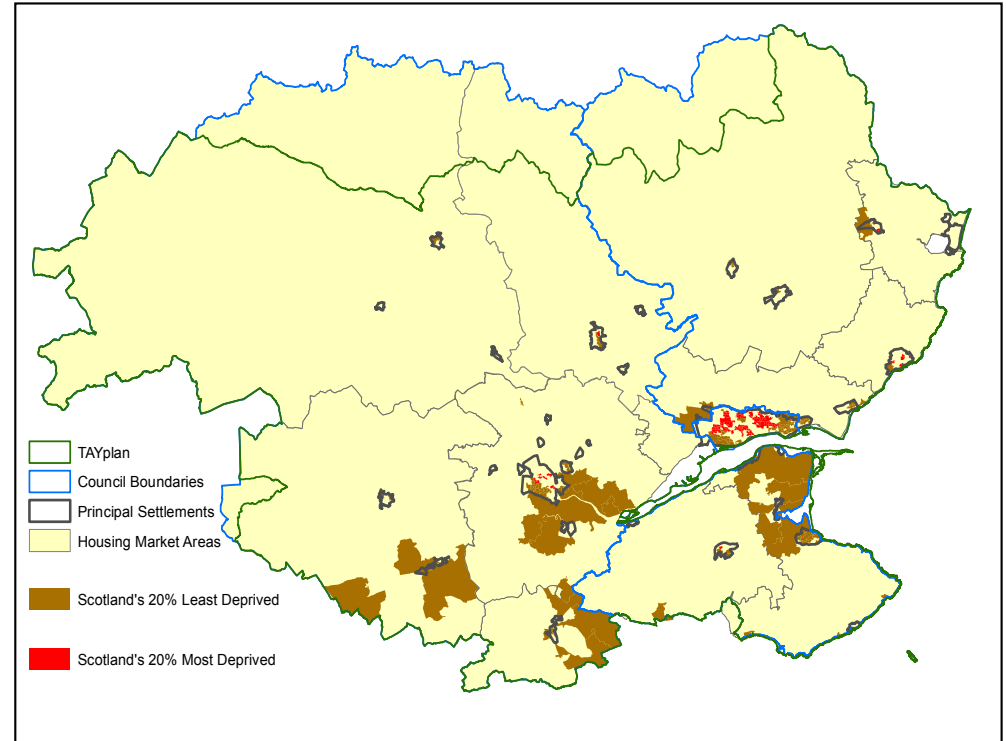
2.31 The distribution of the TAYplan population ranked by Scottish quintile of deprivation has remained relatively static over the period 2004–2012 (Figures 29 and 30). However between 2009 and 2012 there were small increases in the number of people living in data zones ranked amongst Scotland's 20% Most Deprived for parts of Angus, Dundee City and Perth & Kinross. It is plausible to suggest that the impacts of the economic slowdown may have placed some people into more deprived circumstances. It should also be recognised that the SIMD is a system which ranks areas according to performance and so some areas may see little change but would rank differently due to changes in other areas. Regeneration programmes, particularly in Dundee and Perth, have also seen the dispersal of population in areas previously ranking high in deprivation.

Figure 27: Distribution of data zones in TAYplan area ranked amongst Scotland's most and least deprived by decile (2012) (Blue = most deprived and Red = least deprived)



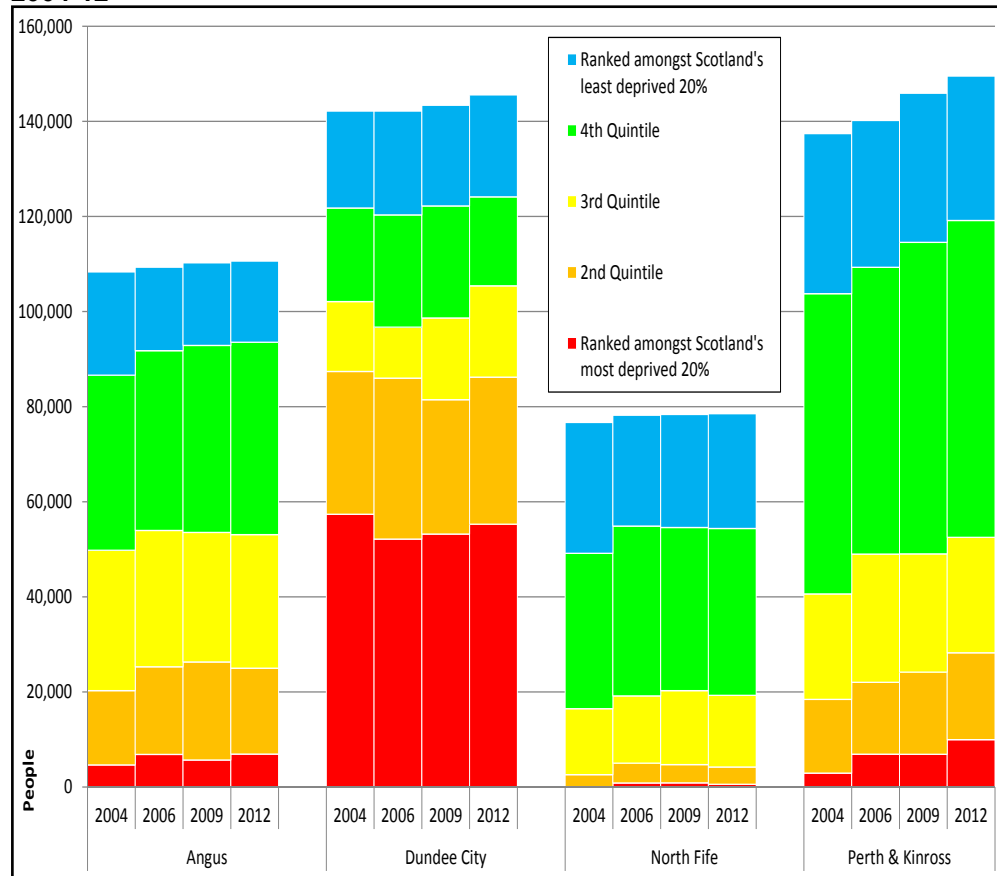
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Source: Scottish Index of Multiple Deprivation 2012

Figure 28: Data zones in TAYplan area ranked amongst Scotland's 20% most and 20% least deprived (2012) (Red = most deprived and Brown = least deprived)



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Source: Scottish Index of Multiple Deprivation 2012

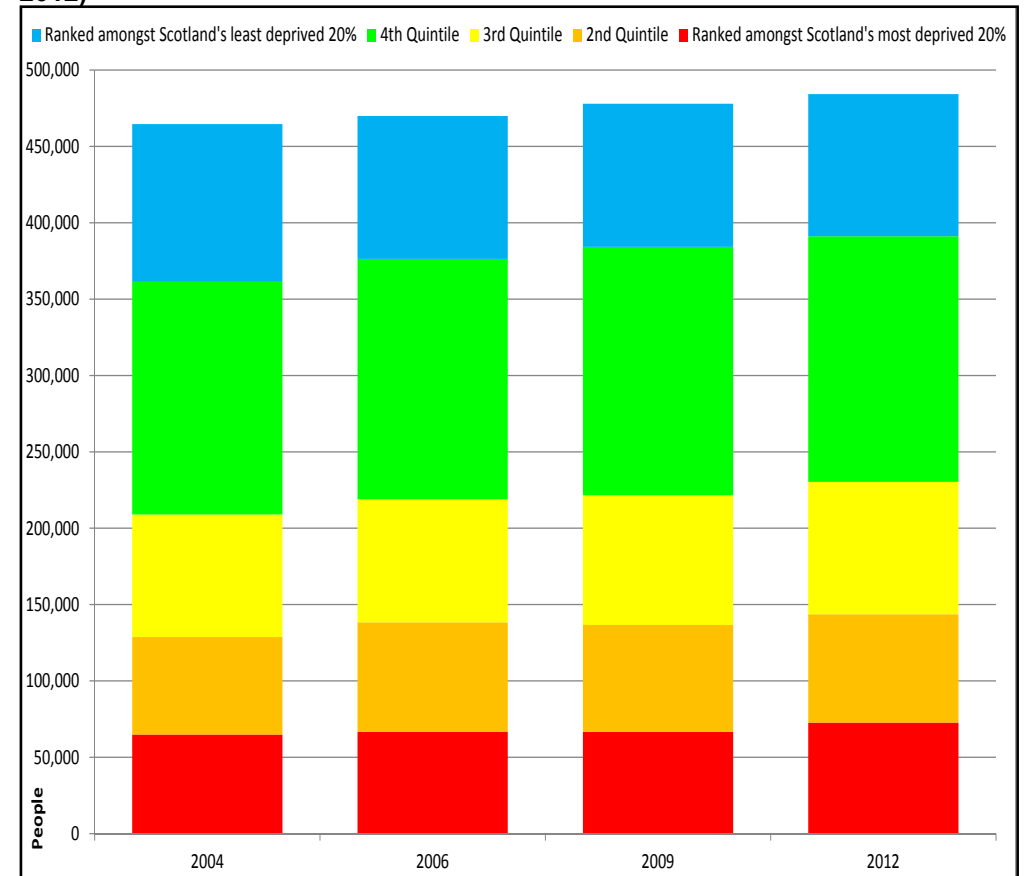
Figure 29: Population in TAYplan council areas by Quintiles of Deprivation 2004-12



Note 2012 figures compared with 2011 mid-year estimates of population

Source: Scottish Index of Multiple Deprivation 2004, 2006, 2009 and 2012

Figure 30: TAYplan level population split by quintile of deprivation (2004 to 2012)

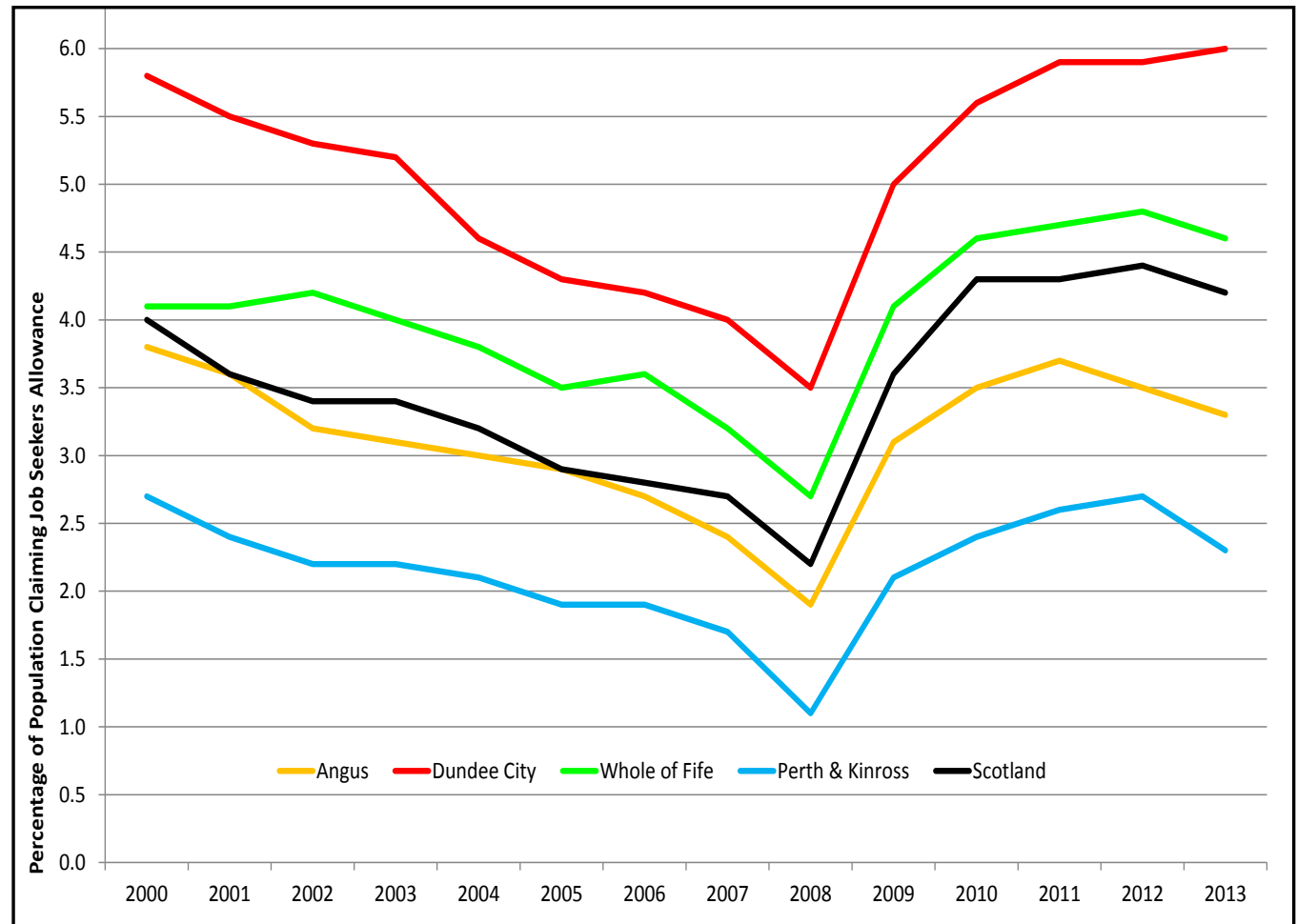


Rise in those claiming out of work benefits

2.32 All four councils saw a fall in the proportion of the working age population (aged 16 to 64) claiming Job Seeker's Allowance in the early part of the last decade and this reflected a trend across Scotland (Figure 31). This coincides with the economic boom which saw more people in work. Although the proportions varied the pattern was the same across all four authorities: from 2008 onwards during the economic down turn when there was rapid growth in all four council areas and Scotland in the proportion of the working age population claiming Job Seeker's Allowance. This rate of growth slowed after 2009 but continued. It slowed again by 2010 and began to drop slightly after 2011 but it rose slightly for Dundee City. By 2010 Scotland and the four TAYplan authorities saw the proportion of those aged 16 to 64 claiming Job Seeker's Allowance reach or exceed levels observed before the year 2000 and the economic boom of the early decade.

2.33 Consistently Dundee City experienced the highest proportion of its working age population claiming Job Seeker's Allowance. Perth & Kinross consistently saw the lowest. Both Fife and Dundee City have consistently seen proportions exceeding the Scottish average. Angus has historically tracked the Scottish average closely but more recently saw a lower proportion of claimants compared with Scotland. So too did Perth & Kinross which saw a wider gap from the Scottish average in more recent years.

Figure 31: Proportion of the local authority population (aged 16-64) claiming Job Seeker's Allowance for the TAYplan area (various years 2001 to 2012)



Source: Department for Work and Pensions

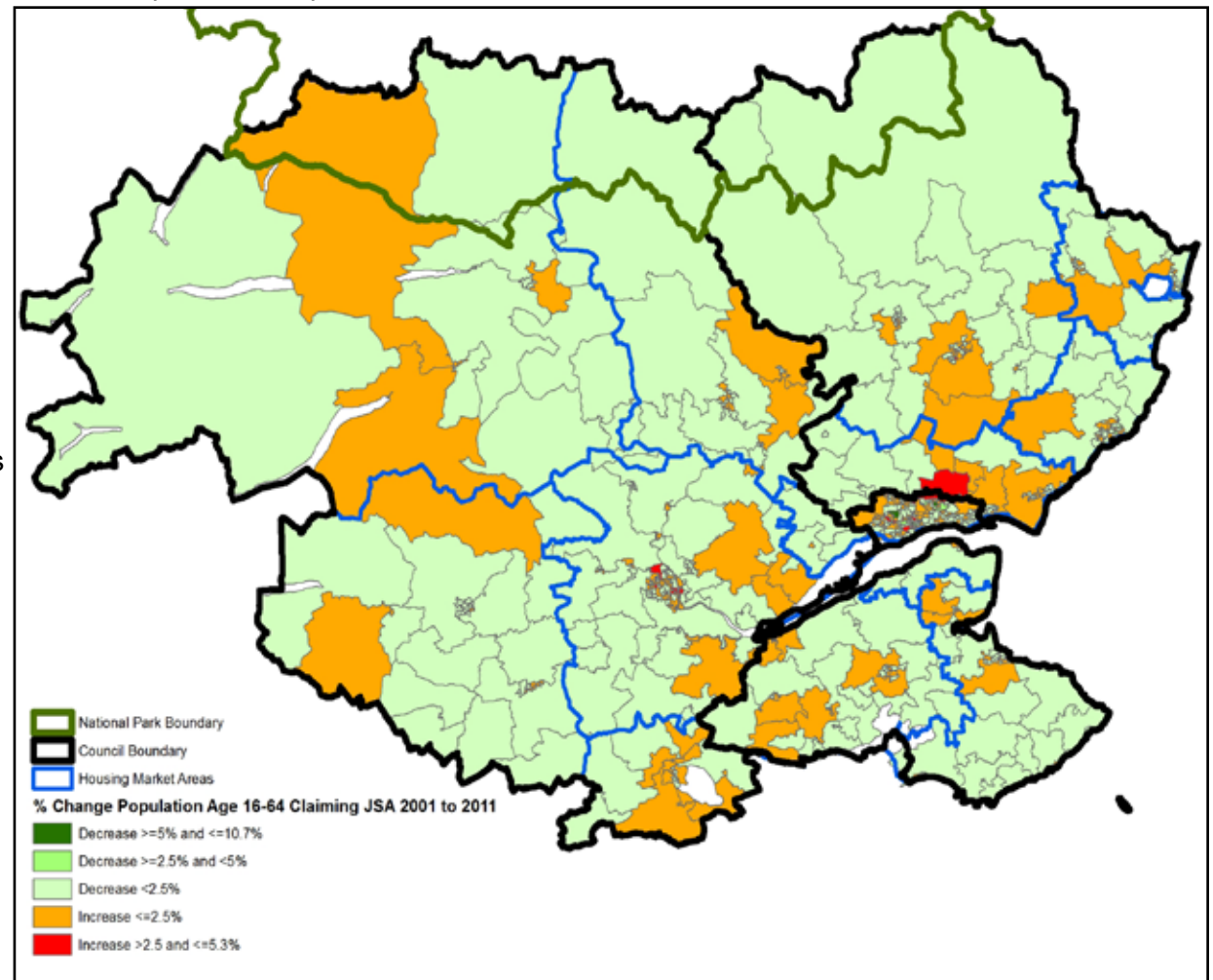
2.34 Figure 32 measures the percentage change between 2001 and 2011 in the working age population (aged 16-64) claiming Job Seeker's Allowance in each data zone to show the spatial distribution of change. However, this only measures the change between 2001 and 2011 and so does not show the pattern of the intervening years illustrated by Figure 31 above.

2.35 Each data zone has a population of approximately 700 people. This means that a change of around 2.5% (as seen in the map) could represent around 20 people. It also needs to be recognised that over this 10 year period some people will have entered and left the working age population.

2.36 The data zones that collectively cover the majority of the region's geographical area show generally saw a fall in the proportion of the working age population claiming Job Seeker's Allowance between 2001 and 2011. This coincides with some of those locations where the population has grown and therefore suggests that the indigenous population of these areas remain in work and that newcomers too have been people in work.

2.37 Those areas which recorded a percentage increase in working age Job Seeker's Allowance claimants are largely within or around Dundee and Perth and also in the areas around Forfar, Kinross, Cupar and some parts of Highland Perthshire. The most marked increases (greater than 2.5%) have been concentrated in Dundee City and Perth and one area just outside of Dundee City. It is possible that these are areas where redundancies resulting from the economic downturn have been felt most significantly. However, it should also be noted that in Dundee City the regeneration of some areas has resulted in the movement of large numbers of council tenants to allow for the demolition of high rise flats. This could have moved some of those that were already Job Seeker's Allowance claimants into different areas where other social rented accommodation is located.

Figure 32: Percentage change in the working age population (aged 16-64) claiming Job Seeker's Allowance (2001 to 2011) at data zone level



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Source: Department for Work and Pensions

Overall

2.38 Over the last decade fewer people lived in areas ranked amongst the most deprived and these changes resulted in part from the effects of the economic 'boom' of the first decade of the 21st century. This saw increases in productivity, growth in employment rates and falls in those claiming job seekers allowance. However, much of this reversed with the onset of the global economic downturn from 2007 onwards.

2.39 The approved TAYplan (2012) was prepared during the period from 2009 to 2012 with full recognition of the economic situation. It sought to improve people's quality of life and recognised the role that sustainable economic growth would play, alongside resource management and place quality.

2.40 As such the approach and the subsequent policy framework remains relevant. The Plan identifies locational priorities for where development should and should not go (Policy 1). This aims to reduce the need to travel and ensure that jobs, services and facilities are located in close proximity to the majority of people. This reduces the need to travel and consume resources to participate in the economy but it also means that economic opportunity is not denied because people cannot access work. This remains a relevant component of reducing socio-economic exclusion. This is also emphasised by approved TAYplan (2012) Policies 2 and 8 which seek to ensure that the design and layout of development enable this and that appropriate developer contributions deliver the necessary infrastructure, service and amenity requirements.

2.41 Policies 4, 5, 6, and 7 each focus on specific locations or types of development and set out decision making frameworks to support sustainable economic growth through land release for homes, shops, businesses and other land uses. These approaches remain relevant to supporting a growing economy and provide the appropriate levels of certainty for investment and job creation.

2.42 But other economic and structural factors including the balance of financial risk and the availability of credit mean that the pace of development is slower than earlier in the last decade. In turn this has slowed job creation and in some cases resulted in job losses.

2.43 The present approach of identifying clear decision making frameworks and land for new development remain appropriate and relevant to support the emerging economic recovery. But the pace of development subsequent pace of recovery in the jobs market and impacts on those who are excluded will also be dependent on wider economic factors over which TAYplan, and other development plans, have no control.

2.44 The *TAYplan Economic Outlook* (2013) was prepared for TAYplan by Oxford Economics. It reflects some of the headline economic trends which have contributed to the outcomes measured above. The *TAYplan Economic Outlook* concludes some opportunities for jobs growth over the next two decades as well as recognising that there has also been recent growth. It is possible that these trends will contribute to achieving improvements in participation.

2.45 However, the *TAYplan Economic Outlook* also identifies the importance of the UK economy in the future of the TAYplan area and in particular how this can be influenced by decisions made in and factors affecting the Euro Zone and USA. This reinforces that although some improvements will be delivered by activities in the TAYplan area but that national and global economic drivers are fundamentally important to the economic fortunes of the TAYplan region.

Intermediate Outcome: We live, work and play in better quality environments

Introduction

3.0 To achieve a better quality of life people must be able to live, work and play in better quality environments. Better quality environments are about the quality of the homes and neighbourhoods people live in and how ecosystems thrive. Good quality places can help our economy be competitive and also help us to be healthier and to live within Earth's environmental limits. The quality of environments can be judged by the perceptions of people who live there and the choices made by visitors. The protection given to built and natural heritage for its own sake and for the social and economic value it brings, along with how people live, work and play all contribute to the quality of the environment. The outcome diagram (below) and the indicators table (overleaf) set out the areas that are being examined in this monitoring statement and the indicators that are being used.

Progress towards this outcome



The 2009 flood risk maps provide a baseline for future monitoring work. The majority of properties at risk from 1 in 200 year events tend to be outwith principal settlements.

The majority of biological features of Sites of Special Scientific Interest (SSSIs) are in good condition. Water quality in rivers, lochs and coastal waters has also improved over the last decade.

Overnight visitors continue to use the region's strong tourism offers. Falls in visitor numbers during 2012 show vulnerability to the weather and competition from other locations.

The built environment continues to be maintained and reused although the recent economic down turn has contributed to a slow down in overall development.

Although the majority of new homes have been built in principal settlements the areas which have seen most

population growth are specific neighbourhoods within principal settlements or areas outside of them. The perceived quality of homes and neighbourhoods are key drivers and these perceptions vary across the region.

Those parts of the region which are amongst Scotland's 20% most geographically access deprived include many of those which also saw the greatest proportional growth in population over the last decade. This suggests that many areas which are geographically access deprived are also amongst those with the highest perceived place quality.

Overall this suggests progress towards improving environmental quality but significant variations in both perception of quality and experience of perceived quality. This is a key driver of choice about where to live and has significant implications for the pattern of development set out in the approved TAYplan (2012) and people's subsequent travel behaviours.

Outcome Flow Diagram

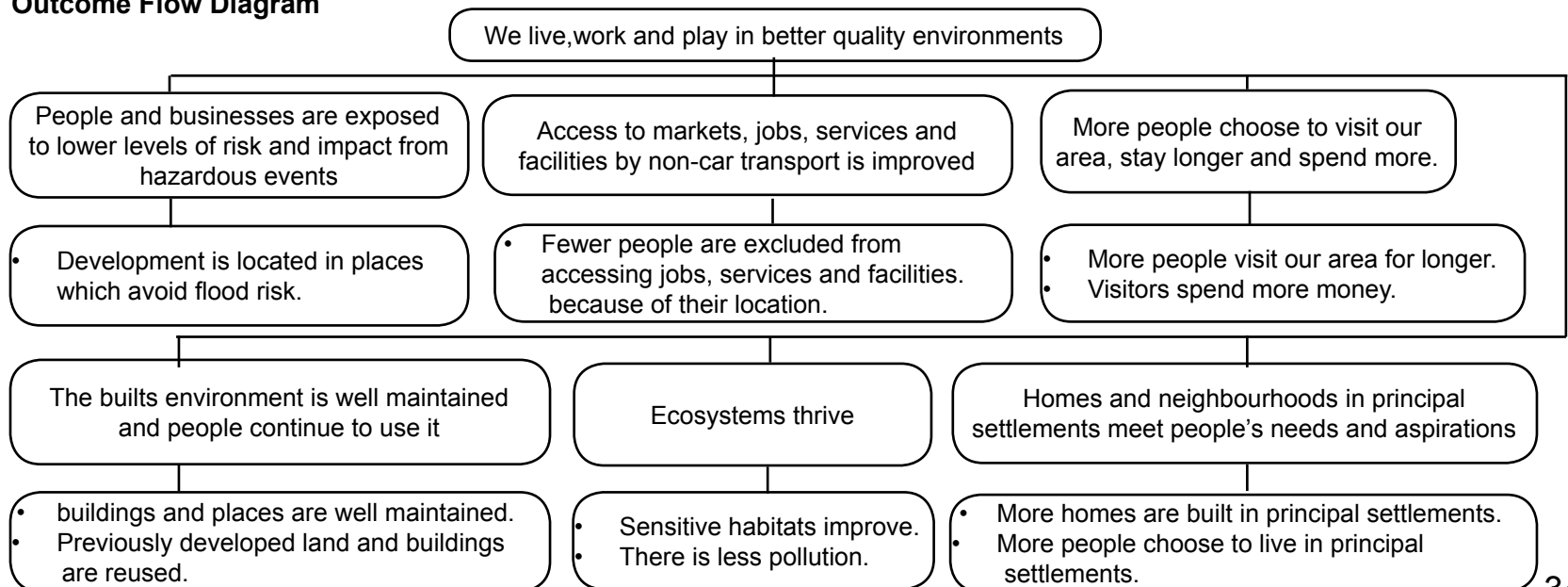


Table of Indicators

Sub-Outcome	Indicators	Source(s)	Rationale
People and businesses are exposed to lower levels of risk and impact from hazardous events.	Percentage of properties at risk of a 1 in 200 year tidal or river flood.	Scottish Environment Protection Agency	These tell us about the geographical extent of flood risk, the geographical extent of property risk and the extent to which flood risk has changed over time.
	Change in the 1 in 200 year tidal or river flood risk line.		
Ecosystems thrive and there are good quality landscapes.	Change in overall water body status 2011.	Scottish Natural Heritage	These tell us about the quality of habitats and ecosystems.
	Condition of mixed and biological Sites of Special Scientific Interest (SSSIs).		
More people choose to visit our area, stay longer and spend more.	Number of overnight visitors by origin.	Visit Scotland	These tell us about the overall number of visitors who stay overnight, where they are from and how much they spend. It does not tell us about day trippers.
	Average trip duration by GB and overseas visitors.		
	Total spend of overnight stays by visitor origin.		
The built environment is well maintained and people continue to use it.	Change in the amount of vacant and derelict land.	Scottish Vacant and Derelict Land Survey	These tell us about reuse of the built environment and the scale of opportunity for the future.
	Proportion of the population living within 500 meters of vacant and derelict land.		
	Proportion of Social Housing failing the Scottish Quality Standard.	Scottish Housing Regulator	This tells us about the quality of the social housing stock.
	Buildings at risk.	Scottish Buildings at Risk Register	This gives us some sense of how important parts of our built environment are looked after.
Home and neighbourhoods in principal settlements meet people's needs and aspirations.	New homes built and programmed in principal settlements and elsewhere.	Council Housing Land Audits	This tells us whether most new homes have been built in our principal settlements.
	Population change.	Mid-year population estimates	This tells us where people choose to live and the overall changes in population.
	Percentage change in data zone population.		
	Median Average House Prices.	Registers of Scotland	This tells us where people most value property. And give us a sense of quality perception about homes and neighbourhoods.
	Residents who are very or fairly satisfied with their house or flat.	Scottish Household Survey	
	Percentage of residents rating their neighbourhood as a 'very good place to live'		These give us some sense of how community perceptions of safety or crime affect them.
	Proportion of adult residents that feel safe or very safe when at home at night.		
	Proportion of adult residents that feel safe or very safe when out walking at night in their neighbourhood.		
	Percentage of adults perceiving that drug misuse or drug dealing is common in their neighbourhood.	This tells us about people's perceptions of democracy.	
Adults agreeing they can influence decisions affecting their local area.			
Access to markets, jobs, services and facilities by non-car transport is improved.	Geographic Access Deprivation.	Scottish Index of Multiple Deprivation	This tells us about changes in geographic access deprivation.

Sub-Outcome: People and businesses are exposed to lower levels of risk and impact from hazardous events

What: Hazardous events can range from those caused by the interaction of humans and development with natural processes; such as flooding, erosion and land slip, to those of human making such as industrial accidents and pollution. The risks of occurrence and from the impacts themselves may be increased as a result of climate change. The location, design and layout of development can contribute to either reducing the risk of the impact occurring in the first place or improving the resilience of a building or a place to cope with the impacts when a hazardous event does occur.

How: The Approved TAYplan (2012) Policy 2A contributes by ensuring that location, design and layout of development avoids exposing occupants/inhabitants of homes and businesses to risk of hazardous events. Many events are difficult to predict and some features of resilience relate to emergency response or infrastructure management, which are not about land use planning. The Approved TAYplan (2012) was informed by a Strategic Flood Risk Assessment and the Strategic Environmental Assessment (2010) examined some of the future risks posed by climate change using the UK Climate Change Projections 2009.

Progress towards this outcome



The present information on flood risk acts as a baseline position. The vast majority of buildings and people are located within principal settlements and broadly these are amongst the places where the lowest proportions of properties are at risk from 1 in 200 year flood events. However, there are still areas within principal settlements that are at risk from 1 in 200 year flood events. This suggests that the emphasis of approved TAYplan (2012) Policy 2A has been apparent in decision making. But future monitoring will be needed to examine changes. This information does not cover risks from hazardous events such as flash flooding, suggesting that resilience will continue to be as important as avoidance in future policy.

Resilience and exposure to risk of flooding

3.1 Monitoring of the Strategic Environmental Assessment and the Approved TAYplan (2012) is interested in the extent to which the 1 in 200 year flood line has changed. This will give some indication of how the geographical extent of 1 in 200 year flood line, and therefore risk exposure, has changed over time. In 2006 the Scottish Environment Protection Agency (SEPA) prepared indicative flood risk maps to show the geographical extent of tidal and river flooding based on a 1 in 200 year event. Over the subsequent years actual events and ground proofing allowed for the correction of anomalies and led to an update in the indicative flood risk maps in 2009. The 2009 indicative flood risk maps therefore represent the most accurate baseline position. This means that at the present time there is only one comparator and it will be for future monitoring statements to analyse updated indicative flood risk maps to show any changes to the 1 in 200 year flood line.

3.2 SEPA has also prepared other information showing the proportion of properties in each data zone that are at risk from a 1 in 200 year tidal or river flood event. This is also important because it tells us about the impact of 1 in 200 year flood events rather than just the geographical extent of them. There is presently only one data release dated at 2006. Work by SEPA and local

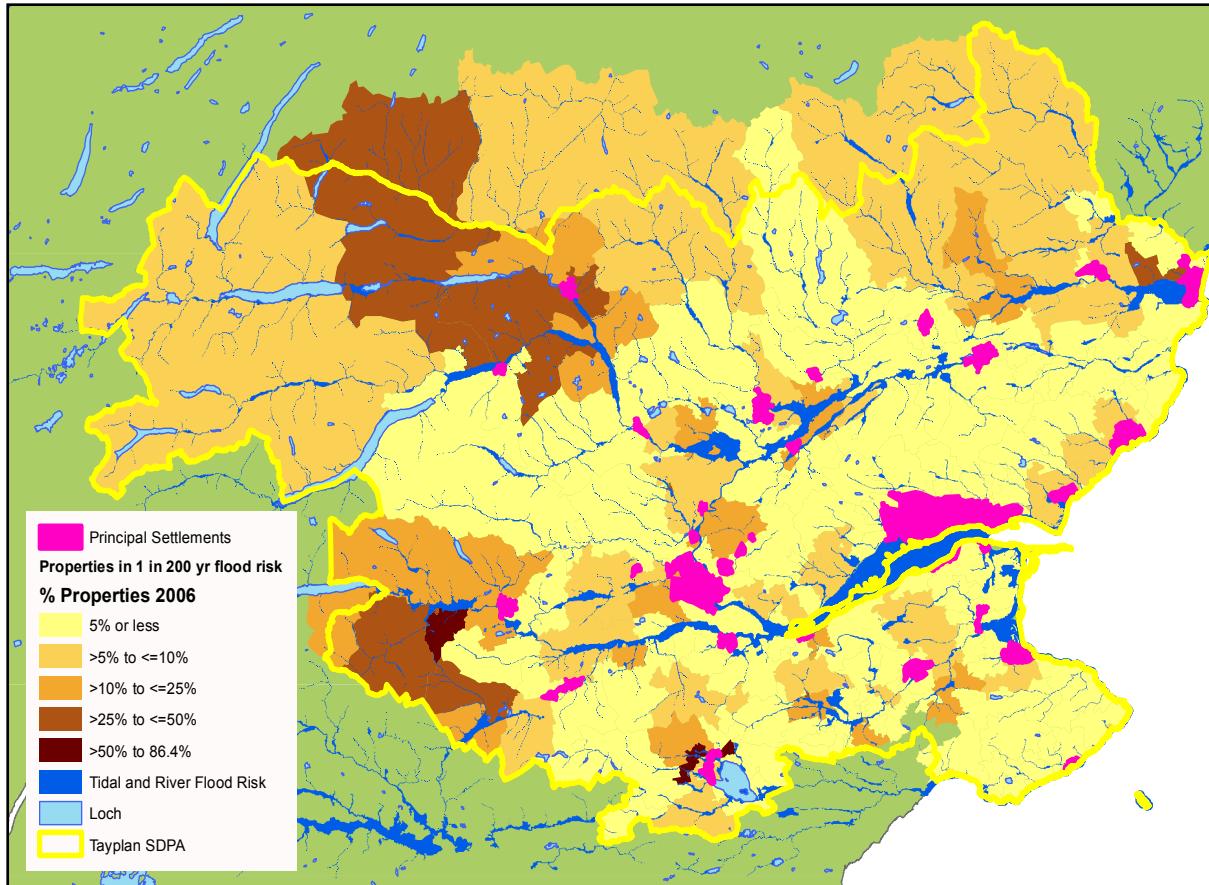
authorities is presently underway using LIDAR and other information to improve the accuracy of this 2006 data. However, for now this is the only information available.

3.3 Figure 33, maps both of the above pieces of information. It shows both the geographical extent of the indicative 1 in 200 year flood risk maps (2009) and the proportion of properties at risk from 1 in 200 year tidal and river flood events by data zone (2006). The darker brown data zone areas are those which include the highest proportions of properties at risk from a 1 in 200 year tidal or river flood event (2006). The data zones with the highest proportions of properties at risk from a 1 in 200 year flood event are located in highland Perthshire, west of Crieff, north and west of Kinross and west of Montrose. The majority of data zones within the region's principal settlements tend to be those with the fewest proportions of properties at risk of a 1 in 200 year flood event. It is important to note that these figures do not include the risks from flash flooding.

Overall

3.4 This information begins to assist in the future implementation of approved TAYplan (2012) Policy 2A. However, there were no comparators at the time of preparation and therefore future Monitoring Statement will be better placed to comment on the relative success or otherwise of this policy.

Figure 33: Indicative 1 in 200 year tidal and river flood risk (2009) and proportion of properties exposed to 1 in 200 year flood risk at data zone level (2006)



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 Source: Scottish Environment Protection Agency (SEPA) and Centre for Ecology and Hydrology (CEH)

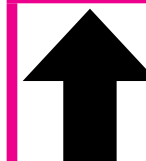
Sub-Outcome: Ecosystems thrive

What: Thriving ecosystems tell us whether the underlying quality of habitats and levels of pollution are appropriate to sustain a variety of plant and animal species. These are important because humans are animals too and rely on natural systems to sustain our existence. The quality of environments is also important for health, recreation and tourism and economic opportunities. There are many factors which affect ecosystems on land and in water including management of drainage, agricultural practices, forestry, development decisions and the protection of specific areas.

How: The Approved TAYplan (2012) seeks to reduce the impact of development on sensitive environments through Policy 1 by focusing the majority of new development within principal settlements. Policy 3 also protects important natural and historic assets for a limited range of land uses to minimise the risk of pollution, the adverse effects of developing land and thereby the potential damage to sensitive environments. Factors including land management techniques, the use of agricultural chemicals and the pollution licencing regime run by SEPA are not within the remit of land use planning.

The quality of water bodies have improved and the majority of mixed/biological SSSIs are in favourable condition. This represents a movement in the right direction.

Progress towards this outcome



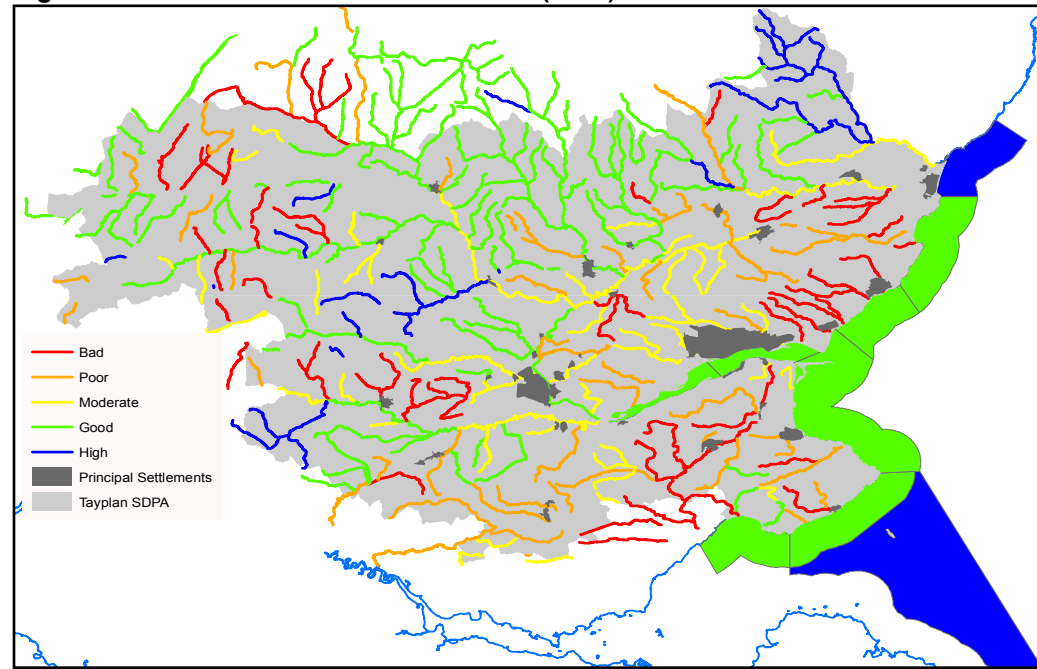
The quality of water bodies and mixed/biological Sites of Special Scientific Interest (SSSIs) is already good and has improved over time. This represents a movement in the right direction, although there are still improvements need to ecological water quality for example.

Water body status improves

3.5 Figure 34 shows that many of the water bodies within the TAYplan area are at high or good ecological status/potential. However, over half of the water bodies in the area are classed as moderate, poor or bad; largely as a result of water abstraction, diffuse pollution, physical (morphological) changes and point source pollution. The majority of water abstractions are for agricultural irrigation and the renewable energy sector, whilst the point source pollution issues relate to sewage disposal. Diffuse pollution is caused from a number of sources, namely mixed and arable farming and also sewage disposal. A number of water bodies have been physically altered to support activities such as renewable energy, water collection and arable farming. The measures required to improve the classification of these water bodies have been identified and are being implemented via the river basin management planning process. This suggests that the present approach in the approved TAYplan (2012) remains appropriate as one component of a series of measures designed to improve water quality.

3.6 Figure 35 includes several graphs showing the ecological status of different water bodies. These generally show a trend of improvement rather than deterioration.

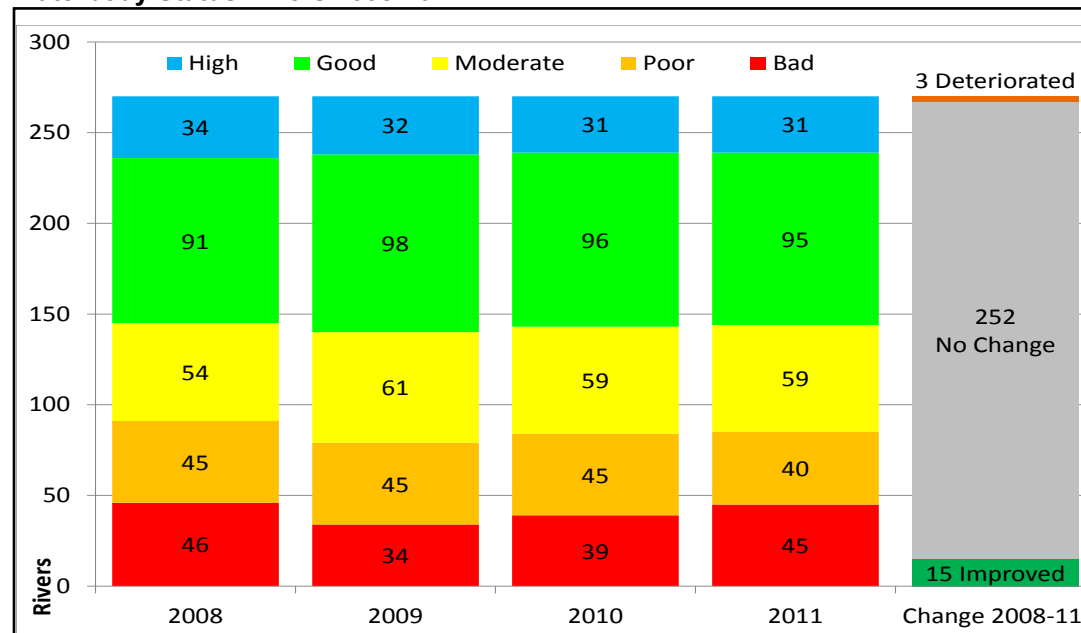
Figure 34: Overall Status of Water bodies (2011)



Source: Scottish Environment Protection Agency (SEPA) and Centre for Ecology and Hydrology (CEH)

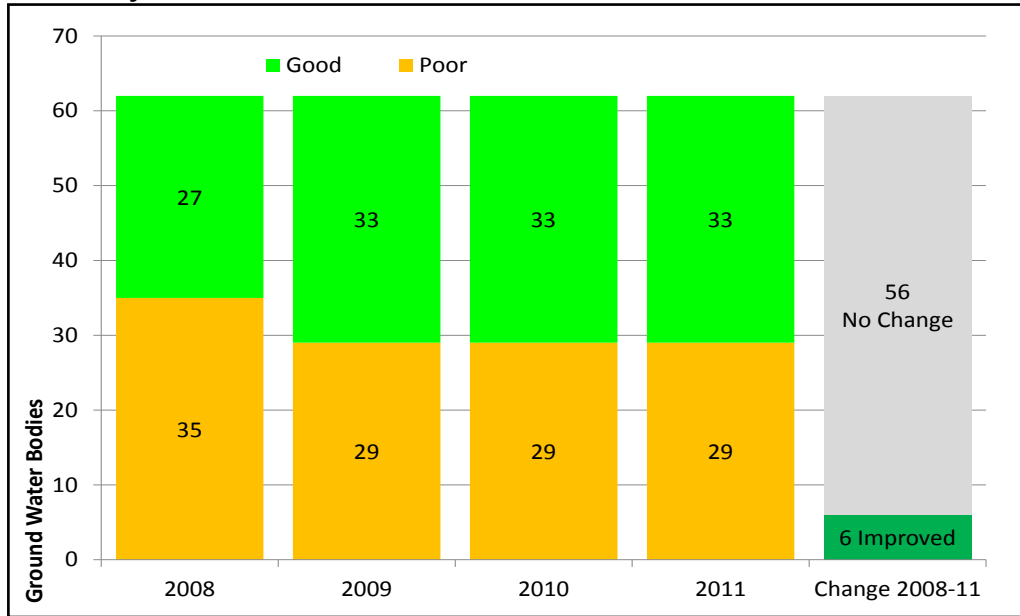
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Figure 35: Changes in water body status 2008-11
Waterbody Status Rivers 2008-2011

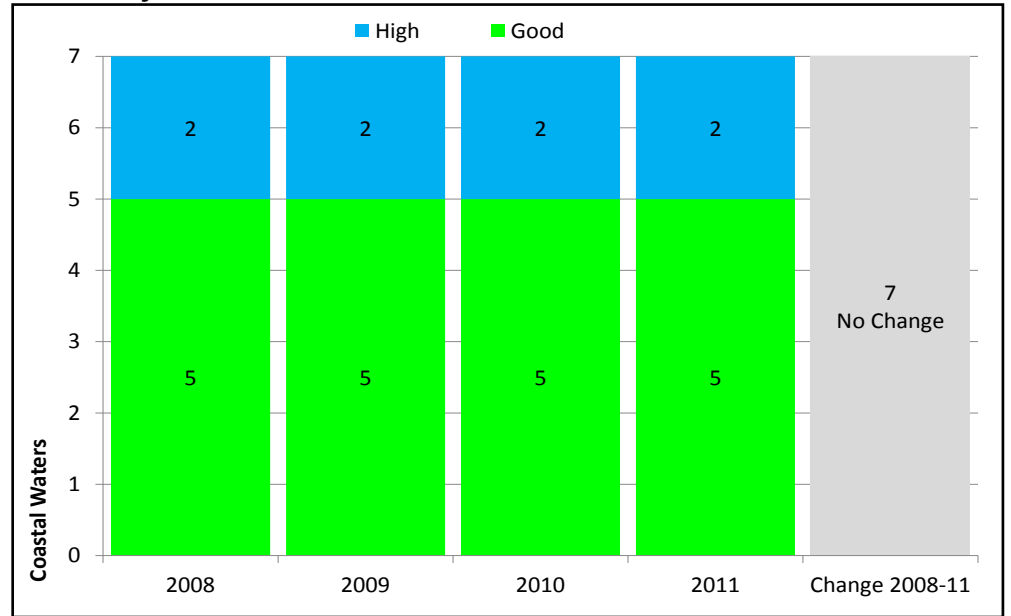


Source: Scottish Environment Protection Agency (SEPA)

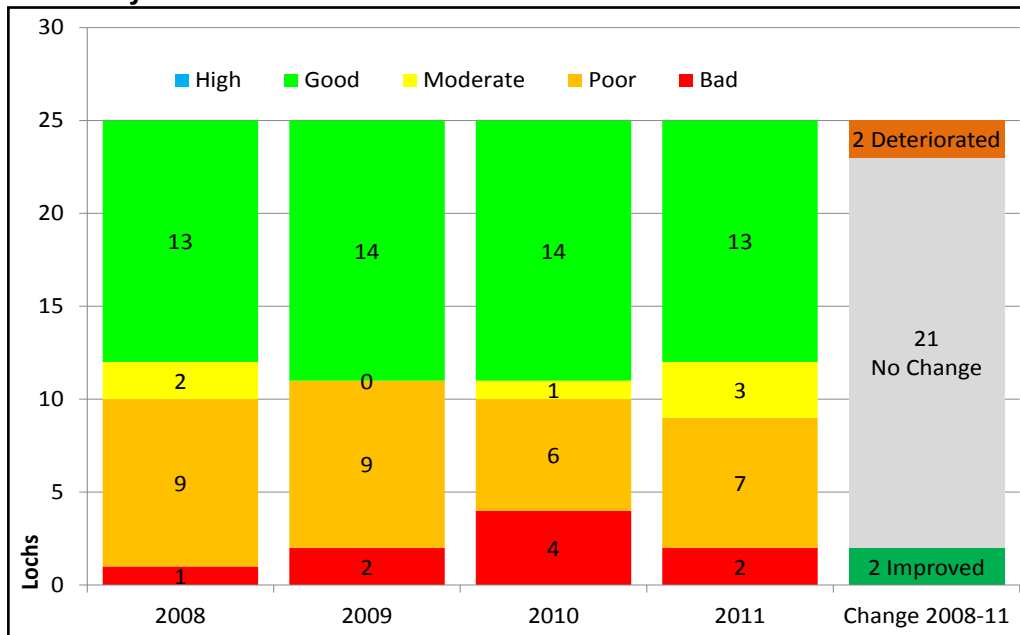
Waterbody Status Groundwater 2008-2011



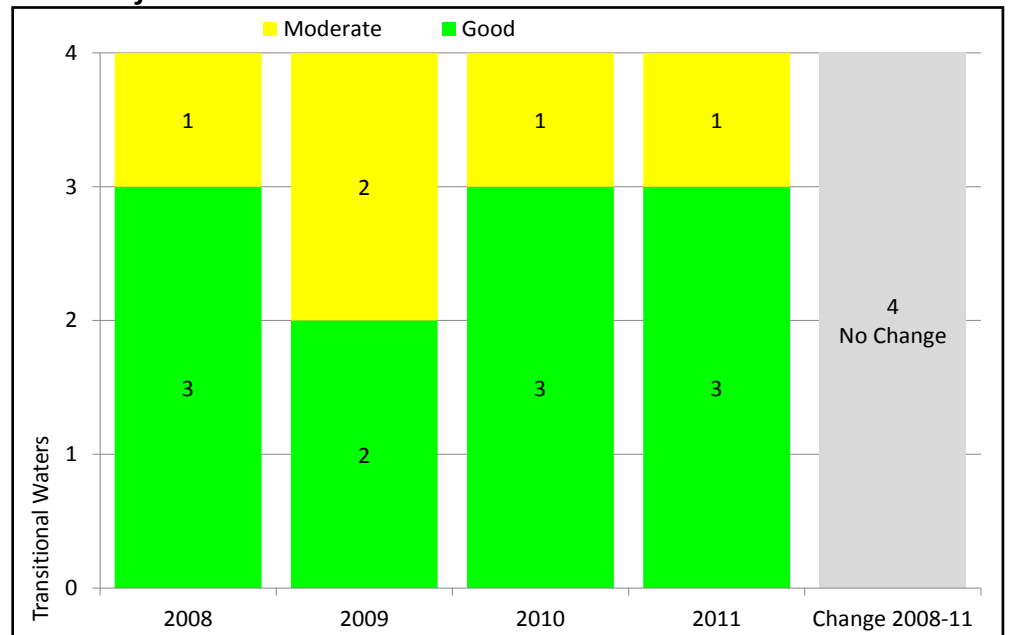
Waterbody Status Coastal Waters 2008-2011



Waterbody Status Lochs 2008-2011



Waterbody Status Estuaries 2008-2011



Source: Scottish Environment Protection Agency (SEPA)

Condition of mixed and biological Sites of Special Scientific Interest Improves

3.7 The Strategic Environmental Assessment (2010) considered Mixed and Biological Sites of Special Scientific Interest (SSSIs) as those designated wholly or partly for biological purposes. Scottish Natural Heritage (SNH) reports to Scottish Ministers on the condition of features within these SSSIs. Most SSSIs therefore contain more than one feature. There are 491 biological features within or partly within the TAYplan area.

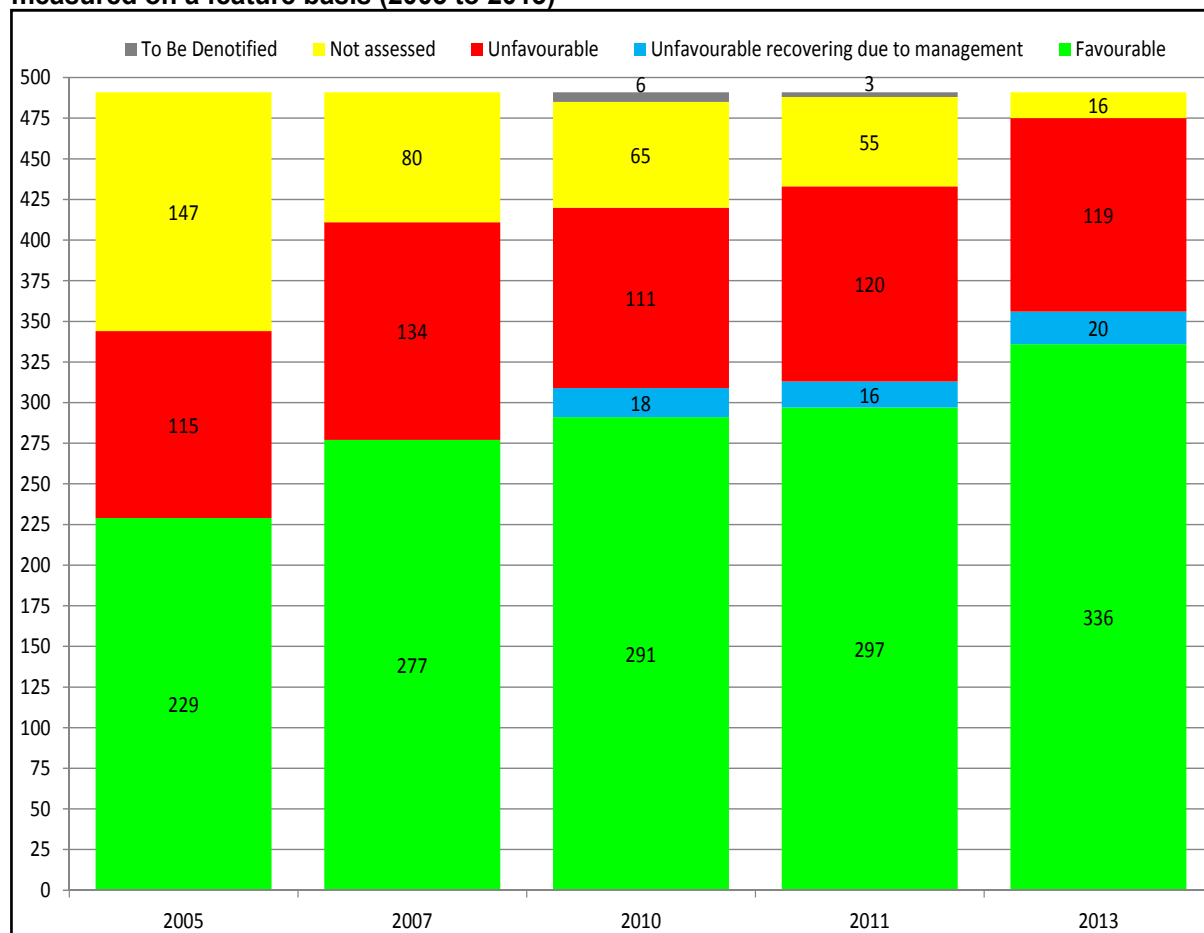
3.8 Since 2005, when measuring commenced, the number of assessed features has increased so that only a small number of features remain un-assessed by 2013. The number of features classed as 'favourable' has increased over the same time period. There is a strong likelihood that this is the result of newly assessed features being found to be in 'favourable' condition. Features in unfavourable condition have remained relatively constant with some slight fluctuations. The fluctuations are thought to result from newly assessed features being found in 'unfavourable' condition and from those that were found to be unfavourable but which are now recovering due to management (identified from 2010). Overall, however, 72% of features were in 'favourable' condition in 2013 and 4% were recovering due to management. By 2013 there remain only 16 features in need of assessment.

Overall

3.9 This information shows that there have been improvements in water quality. This supports the intentions of Policy 3 to safeguard important natural assets but there remain challenges, particularly with regard to agricultural runoff.

3.10 The condition of mixed and biological SSSIs remains a challenge to determine given the remaining need to assess some of the sites for the first time.

Figure 36: Condition of Mixed and Biological Sites of Special Scientific Interest (SSSIs) measured on a feature basis (2005 to 2013)



Source: Source: Scottish Natural Heritage

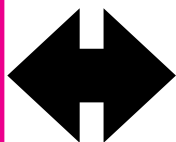
However, the overall majority are in favourable condition and this contributes in some way to the intentions of approved TAYplan (2012) Policy 3 to safeguard natural assets. However, SSSIs remain only one designation type and cover only some parts of the region.

Sub-Outcome: More people choose to visit our area, stay longer and spend more

What: People choose to spend their leisure time in places where they are likely to be happy and relaxed. They therefore pay money to experience quality environments. Sometimes this is places and buildings, or, it may be exhibits, culture and atmosphere, landscapes or sports. The experience is influenced by the quality of the offers and the quality of service, food and accommodation. The number of visitors to our area and how much they spend tell us about the quality of our environment. The figures examined here are for overnight visitors and therefore exclude day trips.

How: The approved TAYplan (2012) Policies 1, 2 and 3 ensure that the location, design and layout of development contributes to enabling businesses geared towards visitors to operate without compromising the reasons why the area is attractive. This includes protecting town centre quality, important and sensitive buildings and environments and appropriately locating visitor facilities. TAYplan also has a role in protecting important and sensitive built and natural heritage from inappropriate development.

Progress towards this outcome



Sporting and cultural events have a strong influence on visitor numbers and trip duration as does the weather. 2012 in particular was strongly affected by the London Olympic Games and a very wet summer. Combined with the global economic downturn it is understandable that there has been a fall in visitor numbers and trip duration in that year.

3.11 Overseas tourists visiting Fife, Perthshire and Dundee and Angus tend to have longer trips than tourists from Great Britain, reflecting that holidays abroad usually represent a main holiday. It also suggests that Great Britain visitors to this area focus, on average, around short breaks and weekends away. Between 2010 and 2012 Angus and Dundee saw a significant drop in the average number of days spent by overseas tourists and a less marked drop in the average number of days spent by tourists from Great Britain. For Perthshire there was a growth in average days spent by overseas visitors but by 2012 both these and Great Britain tourists had both fallen. Fife experienced a significant peak in average trip duration for overseas tourists in 2010. Some of this increase may be explained by St. Andrews holding the Golf Open and the increase in associated foreign visitors associated with this. Trip duration to Fife fell in 2011 and 2012.

3.12 Although there were slight fluctuations in average trip duration from Great Britain tourists this remained relatively similar for each authority over the four years. The fluctuations in trip duration vary far more for overseas tourists and, as suggested above, may in part be driven by sporting and cultural events like the Open. Despite some notable reductions in average trip duration for parts of the TAYplan region by 2012 the figures held relatively constant in Scotland. This may mean that visitors spent more of their time

visiting other parts of Scotland. It is also unclear to what extent the 2012 London Olympics and the very wet summer of 2012 have had on these figures.

3.13 England and Scotland continue to be the origin for the majority of overnight visitors to three areas. Despite some growth to 2011 visitors originating in Scotland fell significantly for Angus and Dundee in 2012. Visitors originating in Scotland and England remained relatively constant for Perthshire and fell slightly for Fife between 2010 and 2011. Over the period it is possible that weak exchange rates and increased pressures on personal finances have led to more people choosing to holiday in the UK instead of abroad. Specific choices about where to holiday are motivated by choices about what to visit and the facilities as well as the type of holiday sought and the weather. The summer weather in 2012 presented significant challenges for the tourism sector.

Overall

3.14 The approach of Policy 3 to support the tourism sector remains appropriate because it seeks to safeguard and support year round tourism within the context of other parts of policy. But the decisions taken by visitors about where to stay is also the consequence of marketing, image and perceptions of value for money and other factors outside the remit of the planning system.

Figure 37: Average trip duration by visitor origin (overnight stays)

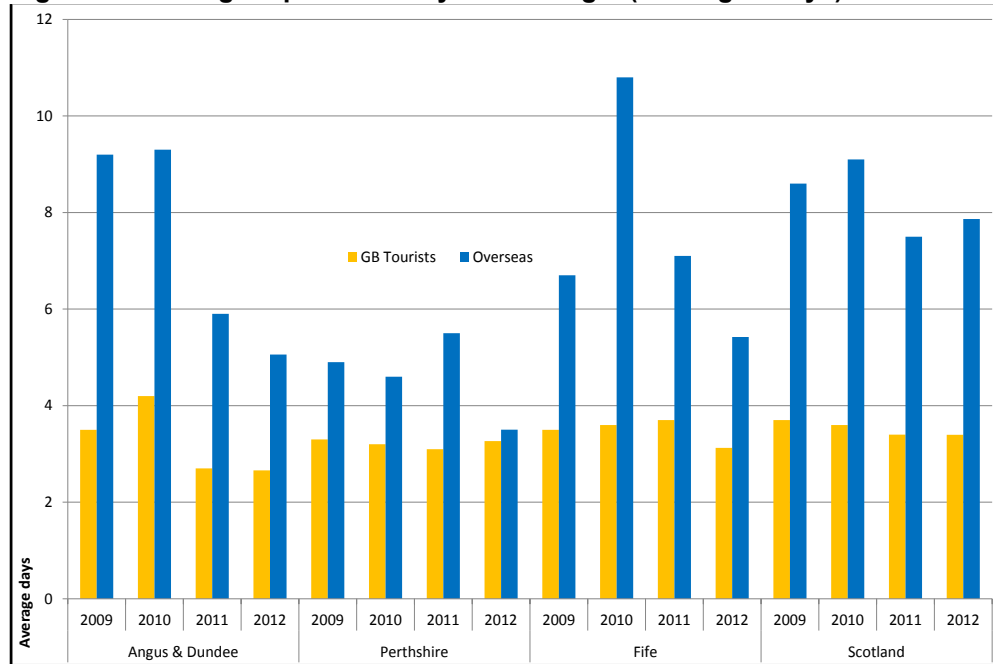


Figure 39: Total spend (£million)

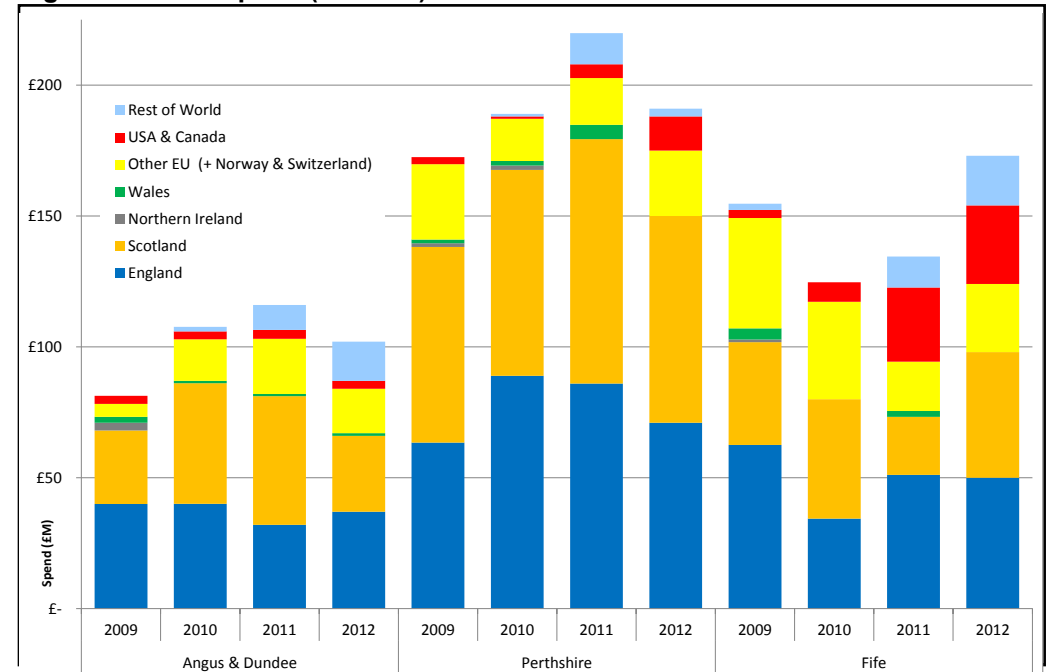
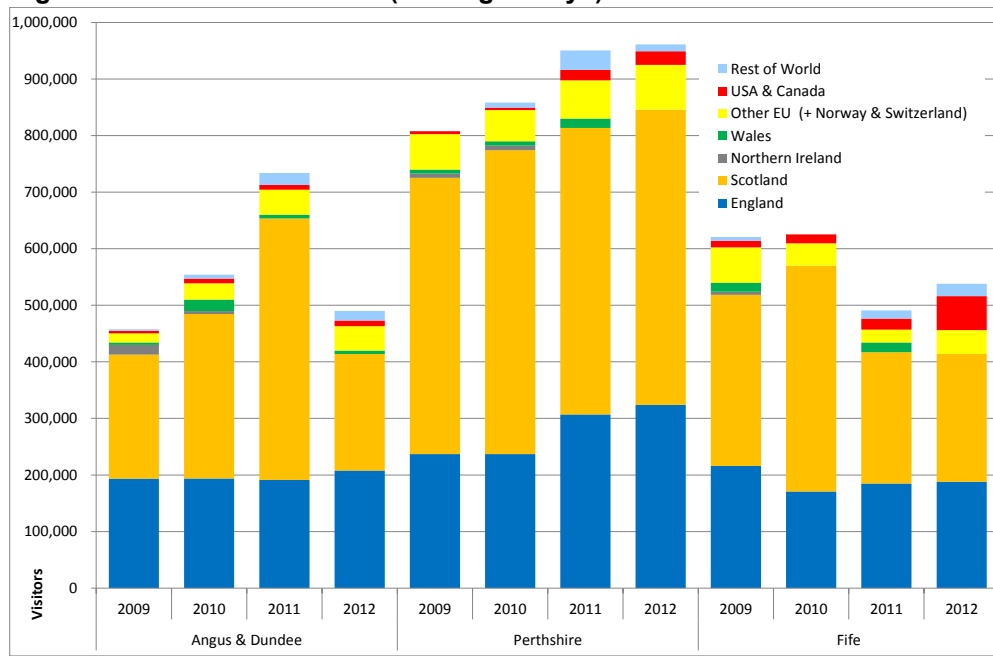


Figure 38: Number of visitors (overnight stays)



Source: Visit Scotland

Sub-Outcome: The built environment is well maintained and people continue to use it

What: The built environment includes homes, businesses, infrastructure and other buildings and structures. The quality of the built environment is important because it influences choices about where to locate domestic and commercial activities. Good quality built environments are inviting to people and businesses and this directly contributes to sustainable economic growth; to reducing the need to travel; and, reducing development in the countryside. It also means that important places are preserved and looked after for future generations to enjoy and provides an important sense of identity and place.

How: The Approved TAYplan (2012) Policy 3 currently protects historic assets including important buildings and places from being lost. Policy 1 focuses the majority of new development within principal settlements and aims to reuse previously developed land and buildings. This contributes to place quality and the continued use of existing buildings and places.

Progress towards this outcome



There has been a general movement to reusing vacant and derelict land but this has been curtailed more recently by the economic downturn. Longer term this suggests a move in the right direction. However, there continue to be buildings at risk and social rented accommodation continues to require refurbishment/improvement. Overall this suggests movements in the right direction but with more to be done.

Vacant and Derelict Land

Derelict land has been so damaged by development, that it is incapable of development for beneficial use without rehabilitation. In addition the land must currently not be used for the purpose for which it is held or a use acceptable in the local plan. Land also qualifies as derelict if it has an un-remediated previous use which could constrain future development.

Vacant land is unused for the purpose for which it is held and is viewed as an appropriate site for development. This land must have either had prior development or preparatory work in anticipation of future development.

3.15 Overall levels of vacant and derelict land have fallen over time but the rate of this has slowed more recently (Figure 40). This is likely to be the result of financial pressures on the development industry from the global economic downturn. The largest amount of vacant and derelict land in the TAYplan area is concentrated in Dundee City and the vast majority of this is vacant land. In the other three authority areas the majority is derelict land.

3.16 The figures for Fife are for the whole of Fife, however, it was possible to disaggregate to North Fife in 2012. This shows that North Fife (TAYplan) represents a very small share of overall vacant and derelict land in Fife, which is concentrated in the former mining and industrial areas of Fife that are outside of TAYplan.

3.17 The percentage of the population living within 500 meters of vacant and derelict land (Figure 41) can be affected by changes in the population as well as the rate of take up of vacant and derelict land. Within the TAYplan area Dundee City has the highest percentage of population living within 500m of vacant and derelict land. A logical explanation is that Dundee City is a higher density urban area and therefore any vacant or derelict land has a higher likelihood of being within 500m of people. In North Fife, Angus and Perth & Kinross, which are larger and more rural in character with smaller settlements this is less likely.

3.18 With the exception of the whole of Fife, the TAYplan authorities follow a similar trend over time to Scotland; with an increase in the percentage of population within 500m of vacant and derelict land. This could reflect reuse and regeneration of some sites bringing larger populations within close proximity of other yet to be redeveloped sites. It is also possible that the economic slow-down has left some sites with ground works commenced but as yet incomplete. It is also possible that business closures or regeneration schemes such as demolition of council owned high rise housing have also contributed. Overall this suggests an improvement in the quality of environments as vacant and derelict land has been brought back into use but that this has slowed recently due to financial constraints.

Figure 40: Change in hectares of vacant and derelict land (2006-2012)

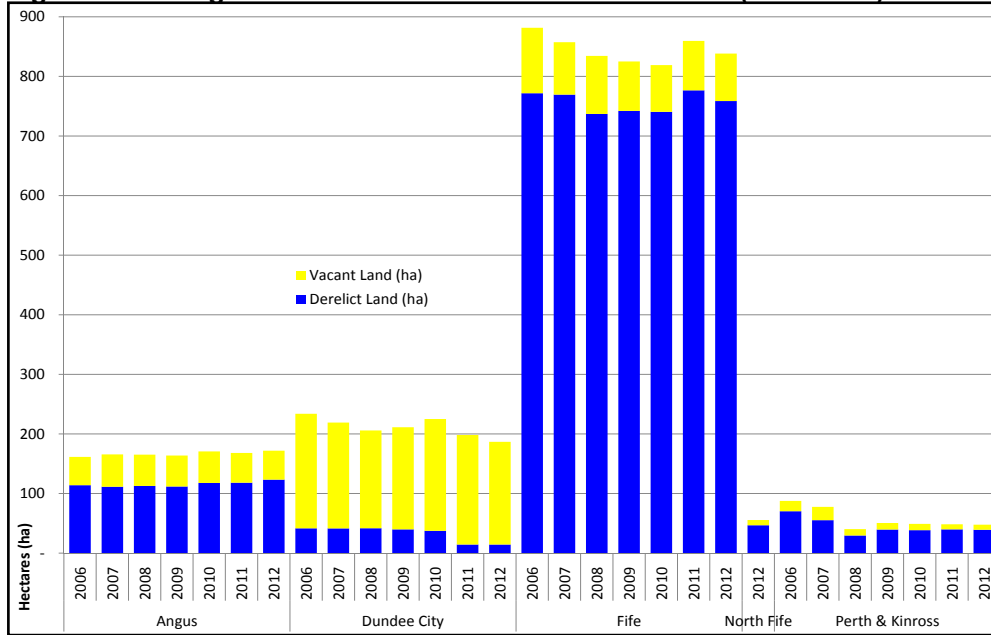
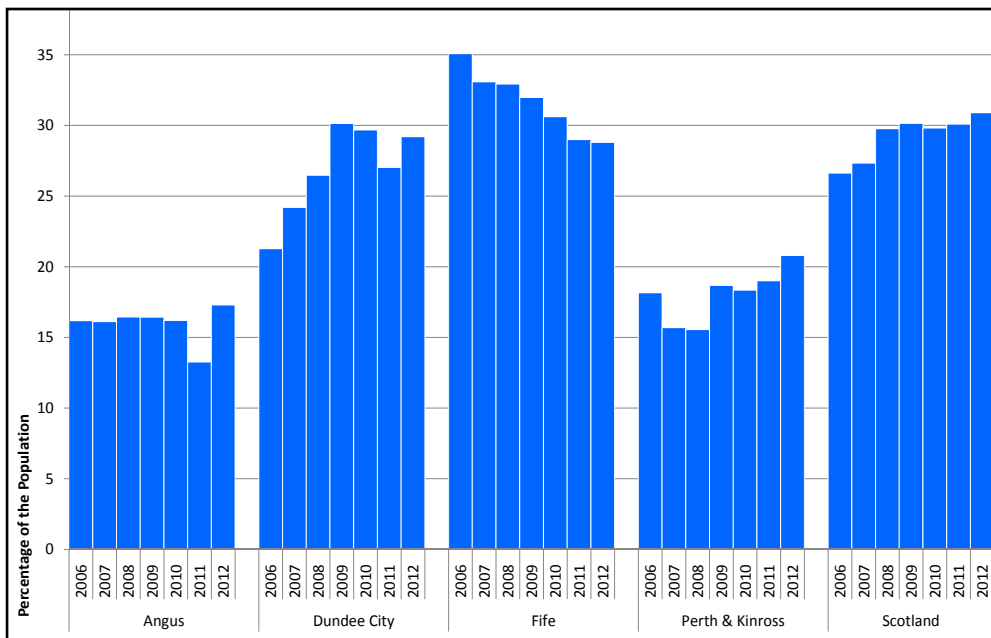


Figure 41: Percentage of the population within 500m of vacant and derelict land



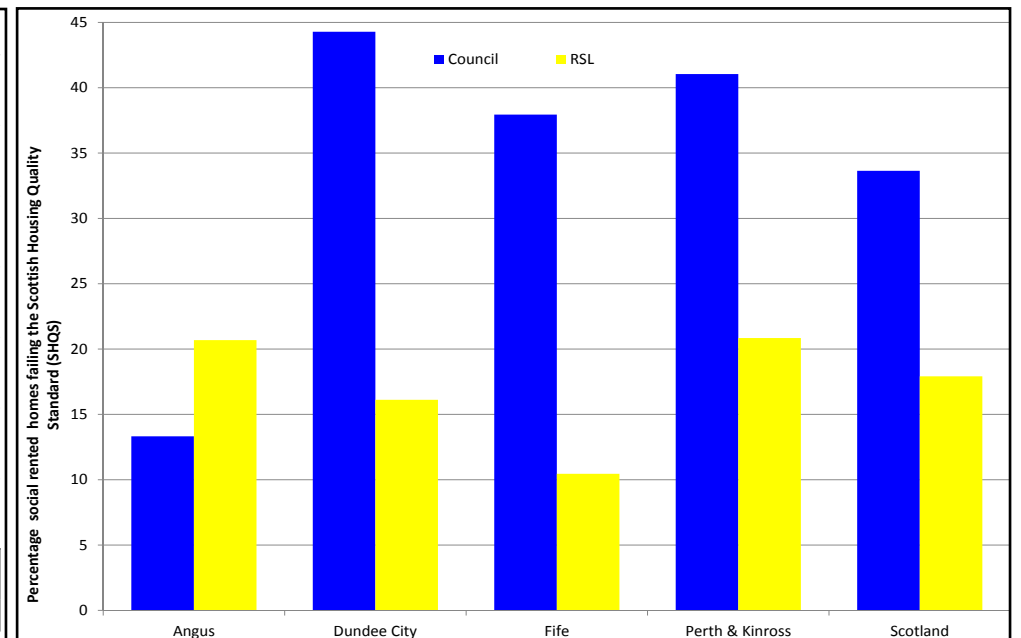
Source: Scottish Vacant and Derelict Land Survey 2012

Quality of the Social Housing Stock

3.19 The Scottish Housing Quality Standard (SHQS) measures the quality of the social housing stock. It aggregates results from 49 different programme modules into 5 higher-level categories. These in turn provide a single pass/fail classification for dwellings. The 5 higher level classifications are: below the tolerable standard; energy efficient; modern facilities and services; healthy; safe and secure; and free from serious disrepair. Only one year's worth of information was available (Figure 42) (2011/12) and this will serve as a baseline.

3.20 All areas except Angus saw Council rented homes with a higher percentage failing SHQS compared with those of Registered Social Landlord (RSL) properties. Dundee City had the highest percentage of Council stock failings (almost 45%), Angus the lowest. The whole of Fife had the smallest percentage of RSL homes failing SHQS. RSL levels in Fife were substantially lower than the Scottish average. Those for the other three local authorities were similar to Scotland levels. With the exception of Angus where the failure levels amongst council homes were higher than the Scottish average.

Figure 42: Social rented homes failing Scottish Housing Quality Standard (2011/12)



Source: Scottish Housing Regulator

Buildings at risk

3.21 This information serves as a baseline for future monitoring of buildings at risk, therefore it only presents information for a single year, as at May 2013. Although several categories are displayed more detailed analysis would be required to understand, for example, the number of high risk buildings that are also A listed or in ruinous condition.

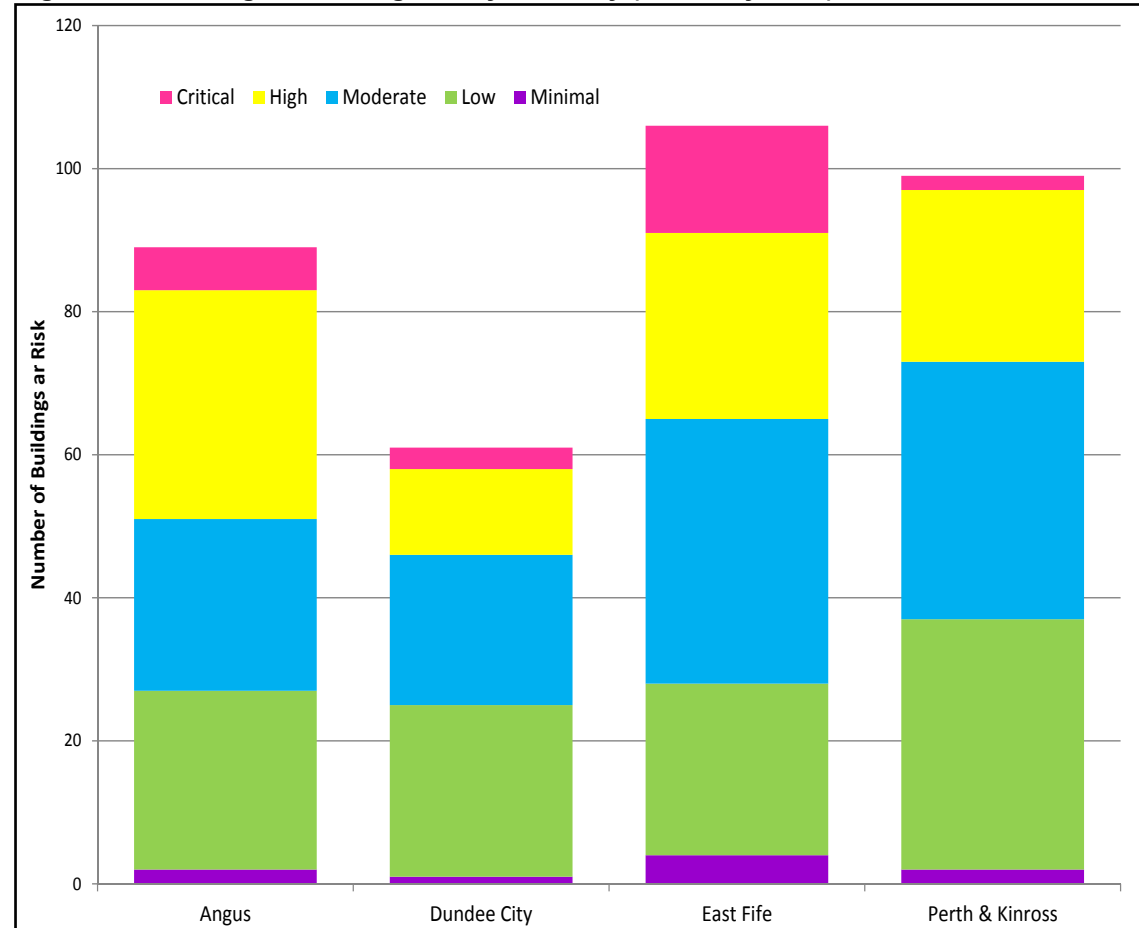
- Angus has the highest number of buildings categorised as high risk. The majority of at risk buildings are B or C listed. Around two thirds are classed as either Very Poor or Ruinous. The majority are described as Rural or Rural settlement.

- Dundee has the fewest number of buildings at risk and the majority of these are B listed. 60 of the 61 buildings at risk are in urban areas, given that Dundee City is largely urban.

- East Fife has the highest number of buildings deemed at risk. Most are rural or in rural settlements. The highest number are buildings at risk are B listed. There are also a comparatively high number of unlisted buildings. The vast majority of the at risk buildings here are considered to be Very Poor, Poor or Ruinous. Only 16 of 106 total buildings here are Fair or Good.

- Perth and Kinross has the second highest number of at risk buildings after East Fife. The majority are B listed and rural or in rural settlements. The majority are poor, very poor or ruinous.

Figure 43: Buildings at risk register by authority (as at May 2013)



Source: Scottish Buildings at Risk Register

Overall

3.22 It is difficult to evaluate the impact of social housing quality and buildings at risk given the limited time series of data.

3.23 The uptake of vacant and derelict land has slowed in recent years showing the correlation between this and the wider economic situation. However, this supports information (presented below) that shows the majority of new home building has taken place in principal settlements

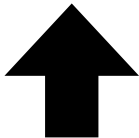
and that the reuse of previously developed land and buildings occurred reflecting approved TAYplan (2012) Policy 1B. But, crucially, the continued implementation of this approach is strongly related to the financial lending environment and development costs; including remediation and any infrastructure costs required to implement approved TAYplan policies 2 and 8.

Sub-Outcome: Home and neighbourhoods in principal settlements meet people's needs and aspirations

What: It is important that homes and neighbourhoods in principal settlements meet people's needs and aspirations because these are the places where the majority of people live. They are also the places whose locations best enable people to access jobs, services and facilities without the need to travel by car. As such these locations are best able to deliver the strategy set out in the approved TAYplan (2012). Considering people's choices about where to live tells us about what they think of principal settlements and the factors which motivate choice in the housing market.

How: The approved TAYplan (2012) Policy 1 focuses the majority of new development within principal settlements to improve access to homes, jobs, services and facilities. Policies 2 and 5 reinforce this and ensure that new development delivers high quality homes and neighbourhoods so that people choose to live in these places. There are many factors which influence choices about where to live in the housing market ranging from type, size and tenure of property to quality of local facilities, perceptions of crime and safety, the price and access to finance.

Progress towards this outcome



Although the majority of new homes continue to be provided in the region's principal settlements population changes show that people have made choices to live in specific neighbourhoods of principal settlements or locations surrounding principal settlements. This reflects what people do when they have freedom of choice. Above all this illustrates that despite building new homes in locations that reflect the location priorities of the approved TAYplan (2012) more needs to be done to improve neighbourhoods to make principal settlements locations of choice.

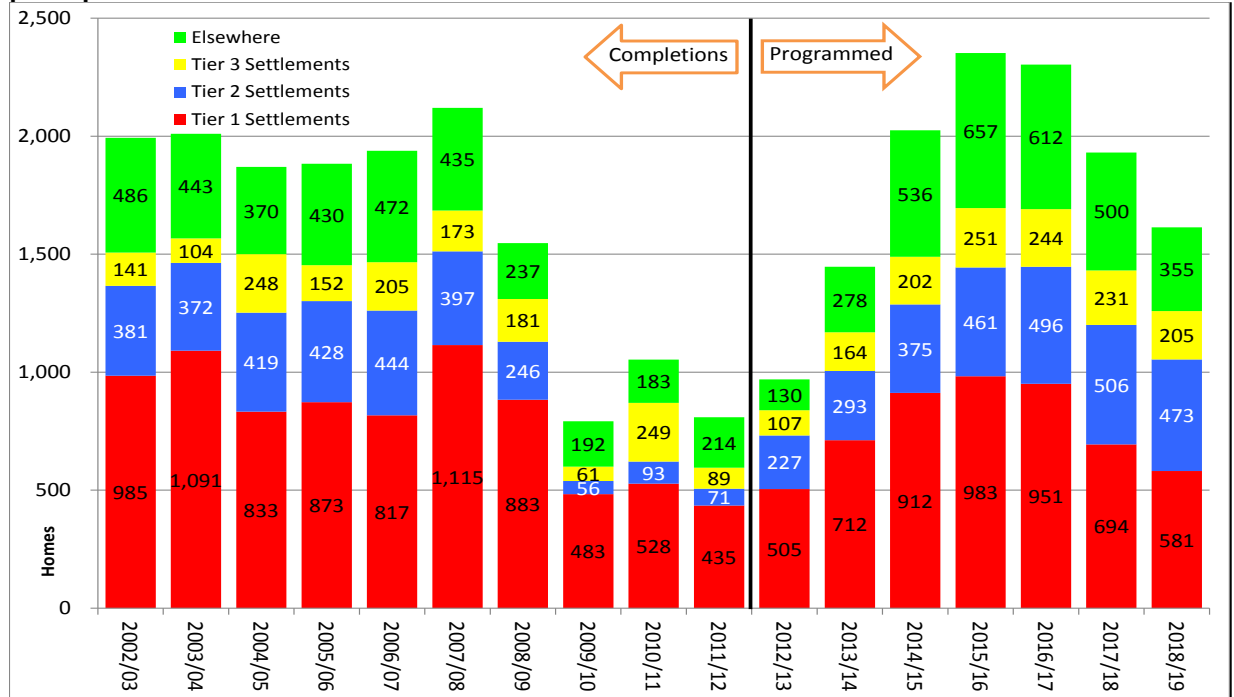
Most homes built in principal settlements

3.24 Build rates were comparatively higher in the period 2002/03 to 2007/08 which coincided with a time of liberal money lending that enabled builders and purchasers to access finance to build and buy homes respectively. Build rates peaked at around 2,000 homes in 2007/08. Following the credit crunch of 2007 and the later recession build rates fell markedly in all areas.

3.25 The majority of new homes were built in principal settlements, and mainly in Tier 1 settlements (Dundee and Perth Core Areas) reflecting TAYplan (2012) Policies 1 and 5. Tier 2 principal settlements experienced the

most significant reduction in build rates post credit crunch. The programmed (anticipated) build rates for the next 7 years show that there is enough effective land available to support a recovery in build rates to pre-recession levels by 2014/15. The largest share of effective building land is in Tier 1 settlements and overall within principal settlements of all tiers. This shows that, of the effective housing land anticipated to be developed over the coming 7 years, the majority is within principal settlements. It also indicates some degree of potential recovery in build rates. However, it will be the financial markets that determine the actual speed of take up and which locations proceed first.

Figure 44: New homes built 2002/3 to 2011/12 and programmed build 2012/13 to 2018/19 split by principal settlements and elsewhere



Source: Source: Local Authority Housing Land Audits as at March 2012. Note: Excludes sites of fewer than 5 homes

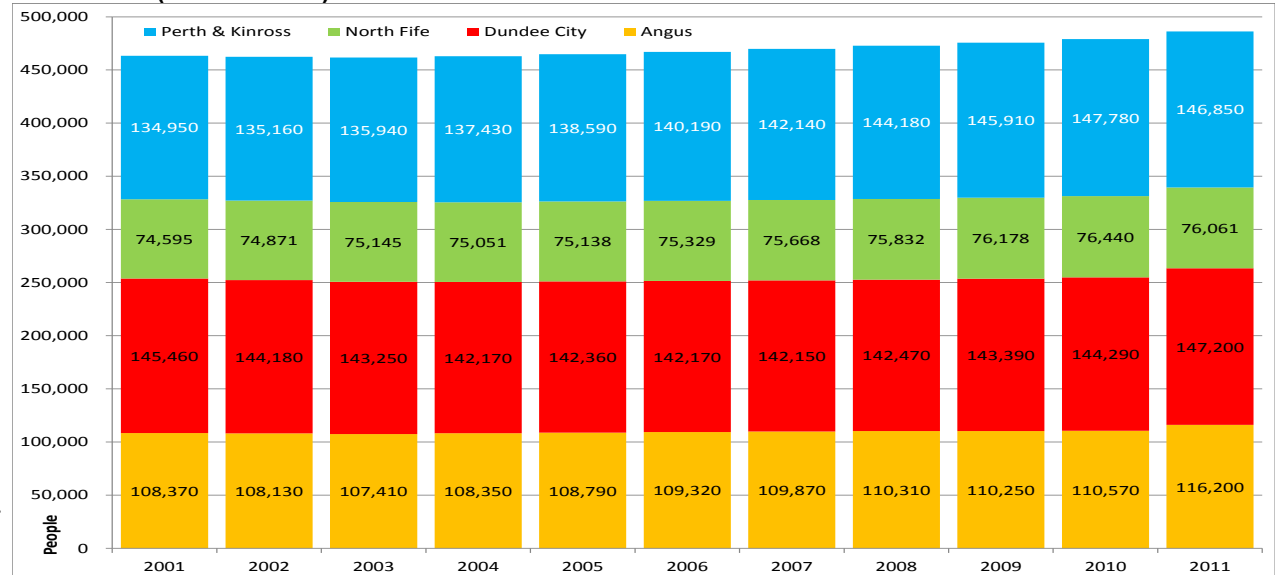
Most people live in principal settlements but areas around them have been growing

3.26 People make choices about where to live based on a series of needs and aspirations tempered by price, availability and access to finance. From 2000 to 2007 comparatively liberal credit markets availability enabled people to express choice more readily than at any time. Since then more limited credit availability and more risk averse financial markets have limited this.

3.27 Overall the population of the TAYplan area grew in each local authority (Figure 45) but at the same time the populations grew particularly in the areas surrounding principal settlements and also some specific neighbourhoods within them (Figure 46). Although the principal settlements continue to account for about 75% of the TAYplan population the majority of the data zones that saw population fall (2001-11) were in principal settlements.

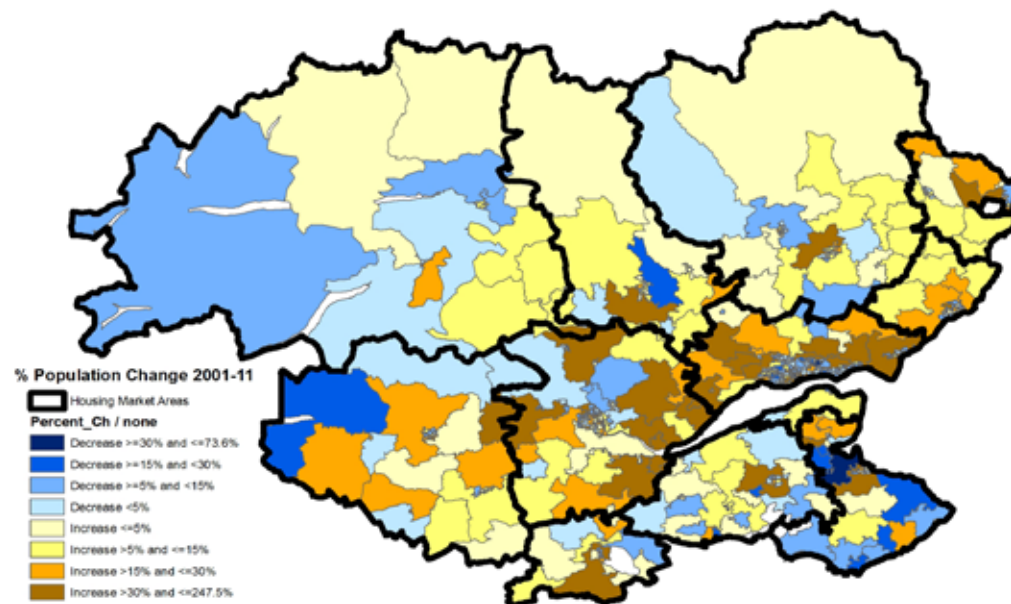
3.28 When considered alongside median house prices (Figure 47) and changes in the Scottish Index of Multiple Deprivation (See Sustainable Economic Growth Chapter) this suggests that the more affluent in society made choices in the market to live in specific neighbourhoods of principal settlements or their surroundings. This is important because it suggests that principal settlements only partially met people's needs and aspirations. It also reinforces the message that delivering sustainable patterns of living require both a sustainable pattern of development based on approved TAYplan (2012) Policy 1 and a strategy focused around making the most sustainable places to live also attractive places to live reflecting the place shaping approach advocated by the approved TAYplan (2012).

Figure 45: Census and annual mid-year population estimates for TAYplan and component local authorities (2001 to 2011)



Source: National Records of Scotland - Mid-year Population Estimates 2001 to 2010, and 2011 Census

Figure 46: Percentage change in Population at data zone level by housing market area within TAYplan (2001-2011)



Source: National Records of Scotland Census 2001 and Census 2011

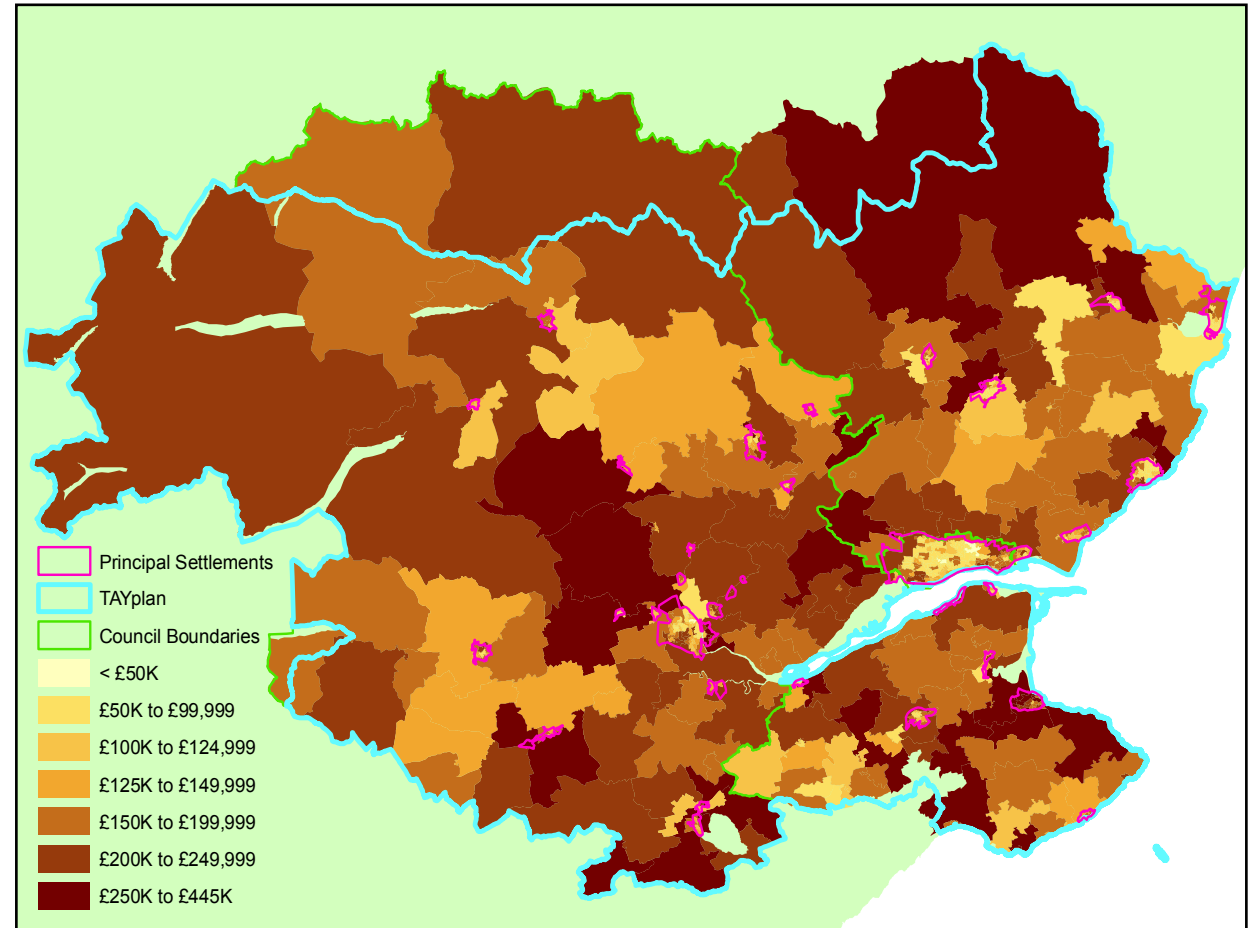
The most highly valued homes tend to be outside of principal settlements or in particular neighbourhoods of principal settlements

3.29 Median average house prices is an accepted measure of typical house prices which strips out the variations caused by very high or very low prices when using the mean average. The following map shows where the market valued properties are highest during 2011.

3.30 The highest prices are in some neighbourhoods of principal settlements, in the areas surrounding principal settlements and in some countryside areas. The lowest median prices are apparent in strongest concentrations in principal settlements and some parts of the countryside.

3.31 The areas which command the highest median prices are those where purchasers place the greatest value on the homes and neighbourhoods. In a comparison market this suggests that these places must be or must be perceived to be high quality places. This does not mean that others do not exhibit good qualities, but it shows the relative values people perceive in the market. Those with the highest median price within the principal settlements and their surroundings also correspond with areas of population growth over the last decade.

Figure 47: Median House Prices (2011)



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Source: Scottish Neighbourhood Statistics based on Registers of Scotland data

People are generally satisfied with their home but less satisfied with their neighbourhood

3.32 This information is based on the Scottish Household Survey and so is a broad indicator of perceptions from a sample survey.

3.33 There are variations in the degree of satisfaction with social and private homes but in all cases most people were either 'fairly' or 'very satisfied' with their house or flat. Only in Angus were the results for satisfaction collectively similar for Private and Social housing. In most cases, private residents seemed to be more satisfied with their dwellings than social tenants. But there were significant differences between those 'Very' and 'Fairly satisfied'. This suggests that generally people are satisfied with their accommodation, but there is room for improvement especially in social housing.

3.34 Those viewing their neighbourhood as a 'very good place to live' differ from authority to authority and over time. In Dundee City the perception has consistently been lower than the other three areas and Scotland as a whole. In Perth & Kinross and Angus those sharing this perception represent a higher proportion and this has generally grown. Both saw neighbourhood perceptions as higher than the Scottish average. For the whole of Fife there has been a substantial increase in 2009/10 and this reflects the situation in Scotland as a whole.

3.35 Overall this suggests that whilst the majority of people may be 'fairly' or 'very satisfied' with their home they are far less satisfied with their neighbourhood. Therefore although the type, size and tenure of property remain important factors the quality of the neighbourhood and locality is just as important.

Figure 48: Comparing the percentage of occupants in the private and social sector who are very satisfied or fairly satisfied with their house or flat for three year average periods (2003-07 to 2009-11) for the four TAYplan authorities (including the whole of Fife) and for Scotland.

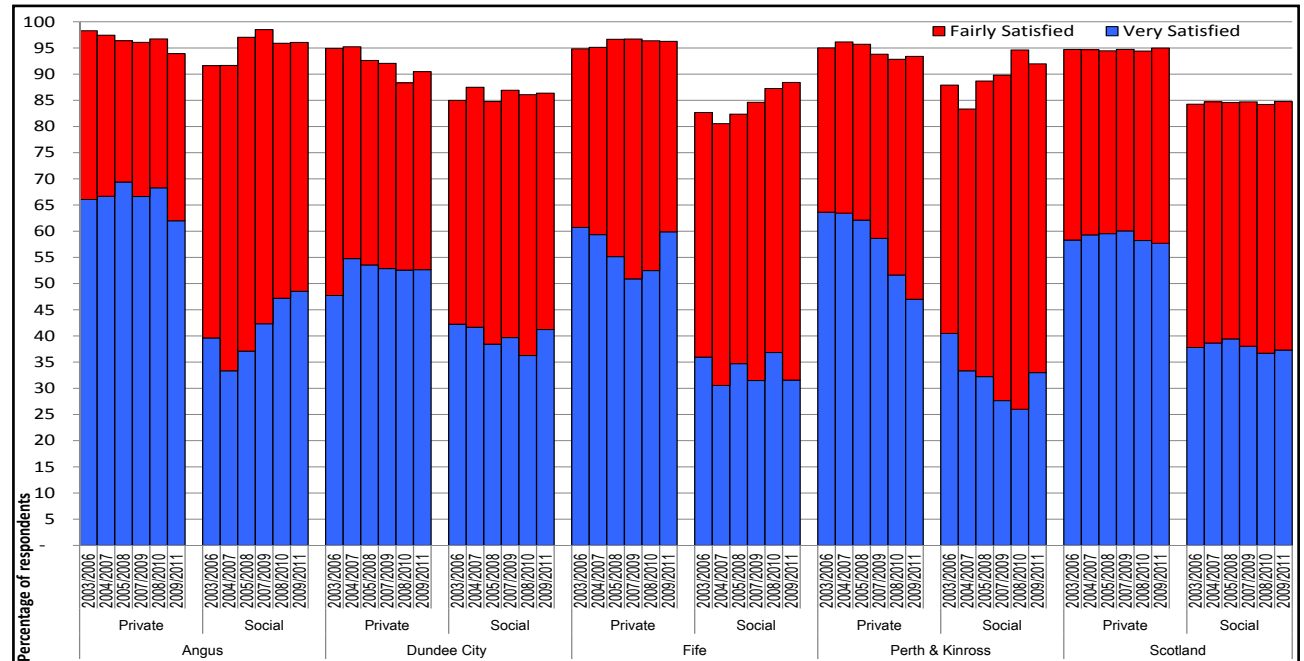
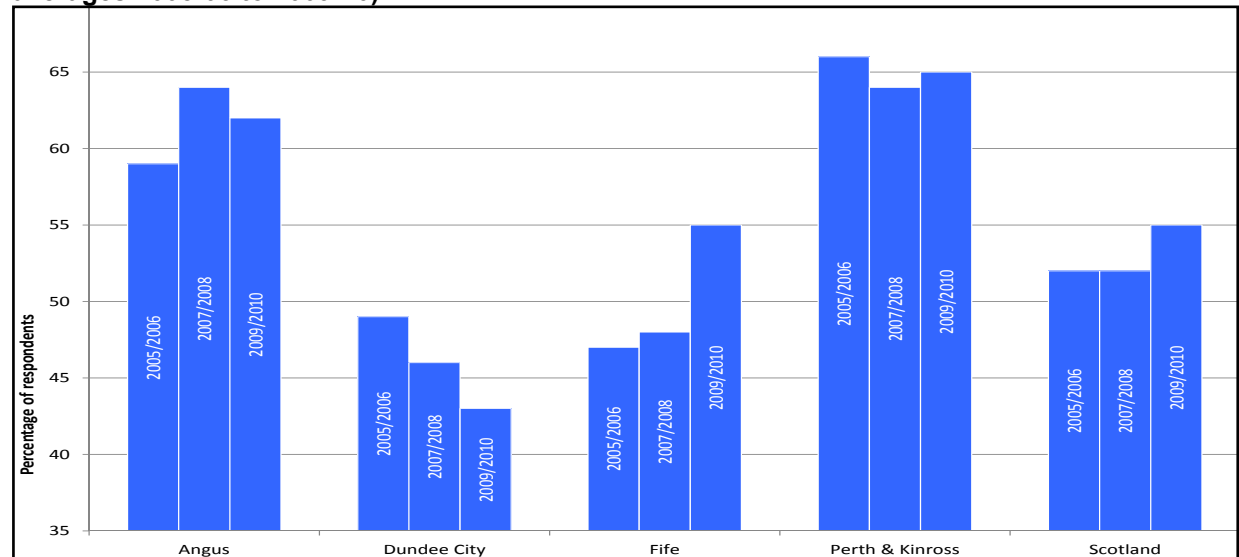


Figure 49: Percentage of residents rating their neighbourhood as a 'very good place to live' (two year averages 2005-06 to 2009-10)



Source: Scottish Household Survey

Most people feel fairly safe or very safe at home and when out walking at night

3.36 Although those agreeing they feel fairly safe or very safe at home at night vary over time and between authorities the overall level of feeling fairly or very safe is relatively consistent for all areas at around 95%. This is consistent with the Scottish average. Over three quarters in most authorities felt very safe at home at night which was above the Scottish average. In Fife this was closer to two thirds and more reflective of the Scottish average. This information covers the whole of Fife.

3.37 Those agreeing they felt very safe or fairly safe whilst out walking at night fell compared with safety perceptions at home. Levels ranged from just under three quarters in Dundee City to 85% in Perth & Kinross. For the most part these rates are similar to or exceed the Scottish average.

3.38 This suggests again that neighbourhood or locality perceptions differ from perceptions of properties.

Overall

3.39 Although most new homes were built in principal settlements, reflecting approved TAYplan (2012) Policy 1, the choices made by consumers in the housing market saw growth in the population of specific neighbourhoods and areas surrounding principal settlements. Both house prices and overall satisfaction with properties and neighbourhoods reveal the importance of place quality in decision making about where to live. This reinforces the importance of approved TAYplan (2012) Policies 2, 3 and 8 in making the region's most sustainable places also those where people most want to live. Although the emphasis of Policies 2, 3 and 8 remain appropriate to this end this information shows that there are still significant disparities in place perception. There is still, therefore, more to be done to improve place quality in the future. These conclusions are also reflected by the *TAYplan-wide Joint Housing Need and Demand Assessment* (2013).

Figure 50: Proportion of adult residents that feel safe or very safe when at home at night (two year averages 2005-06 to 2009-10)

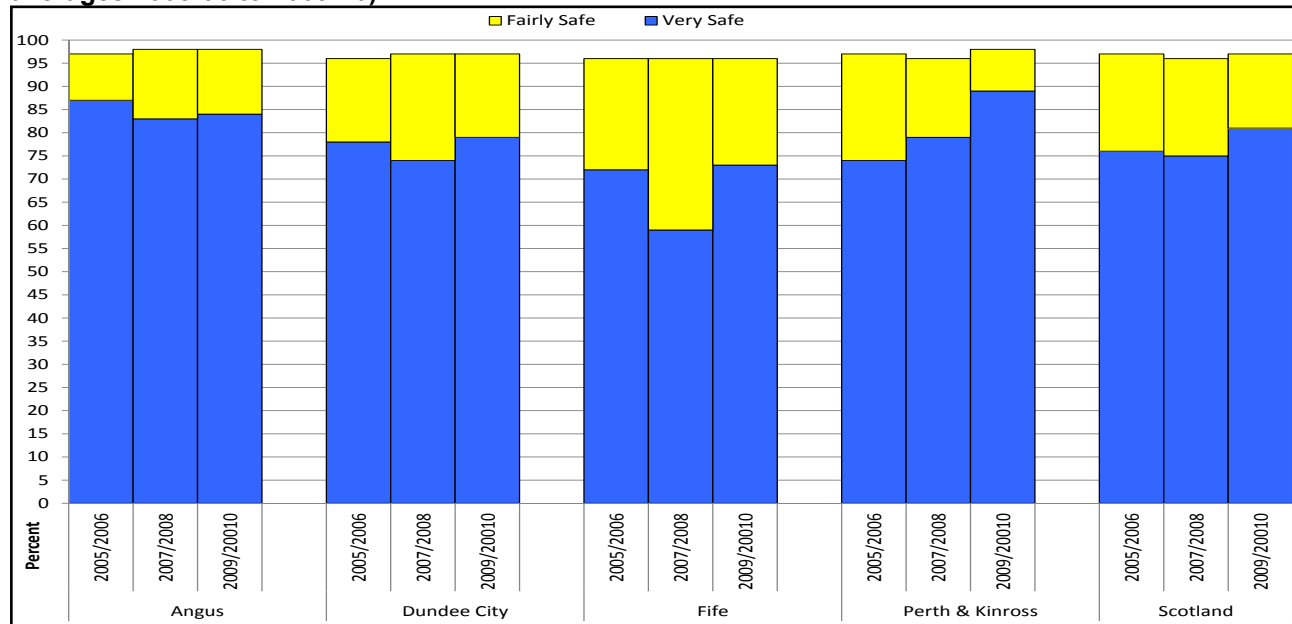
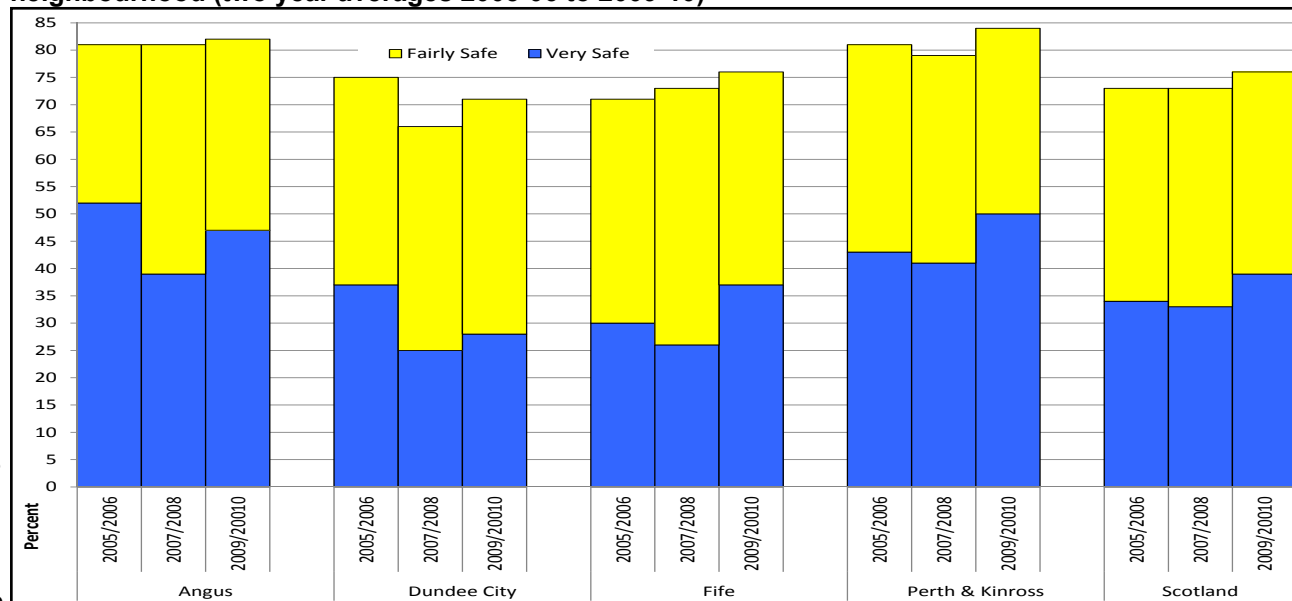


Figure 51: Proportion of adult residents that feel safe or very safe when out walking at night in their neighbourhood (two year averages 2005-06 to 2009-10)



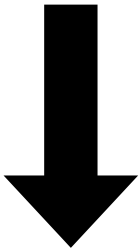
Source: Scottish Household Survey

Sub-Outcome: Access to markets, jobs, services and facilities by non-car transport is improved

What: It is important that people can access jobs, services and facilities without the need to travel by car. This is about the quality of environments being capable of enabling people to access jobs, services and facilities without the need for a car from a social inclusion perspective, to promote healthier lifestyles and to live within Earth's environmental limits. Therefore, people do not live, work or play in better quality environments if the location, design and layout of development ultimately diminishes or limits access to jobs, services and facilities.

How: The approved TAYplan (2012) Policies 1, 4, 5 and 7 have a role in ensuring that the majority of new development is located in principal settlements to enable people to access jobs, services and facilities without having to travel by car. Although the location and proximity of development has a strong role in enabling access this is also influenced by digital and transport infrastructure and service availability, and by people's choices about where to live. The most affluent may overcome some issues relating to access by their ability to pay for car transport. Earlier analysis about population change points to this being the case over the last decade.

Progress towards this outcome



The majority of new homes have been built in principal settlements and are therefore in locations which are amongst Scotland's least geographically access deprived areas. However, the choices made by consumers in the housing market over the last decade have led to growth in the number of people living in area which are ranked amongst Scotland's 20% most geographical access deprived.

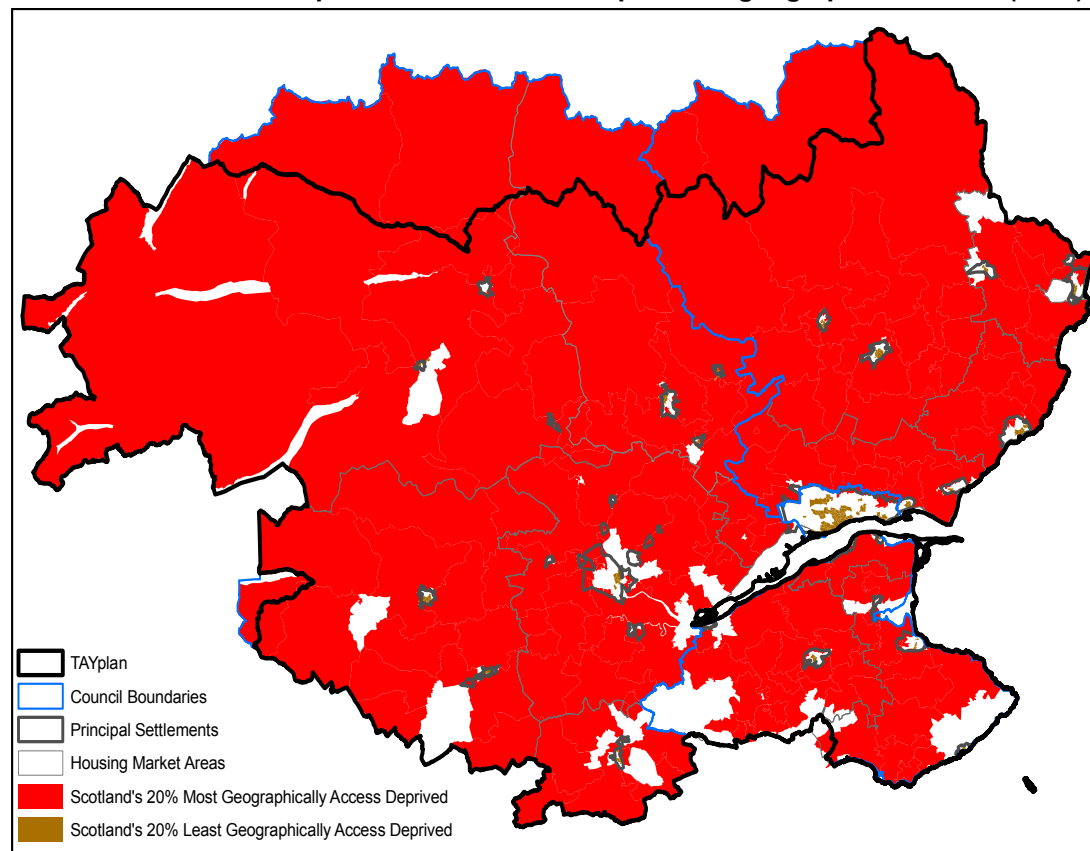
From a strategy perspective this suggests that lifestyle choices based on place quality perceptions have increased the number of people choosing homes in places which limit accessibility to jobs, services and facilities. Therefore although the approved TAYplan (2012) is directing development to the right locations more needs to be done to make neighbourhoods in principal settlements places where people choose to live.

3.40 The geographical access domain of the Scottish Index of Multiple Deprivation considers: Drive time to GP Surgeries, Fuel Stations, Post Offices, Retail Centres, Primary Schools and Secondary Schools. Along with Public transport times to GP Surgeries, Post Offices and Retail Centres.

3.41 The data zones that cover the vast majority of the TAYplan geographical area are ranked amongst Scotland's 20% most geographically access deprived data zones. However, these areas are largely in the countryside, characterised by small settlements and representing jointly around 20 to 25% of the population. The majority of the TAYplan population are concentrated within principal settlements, which include some of the data zones ranked amongst Scotland's 20% least access deprived.

3.42 Over time the number of people living in data zones that are ranked amongst Scotland's 20% most geographic access deprived has increased. This reflects the population increases in areas surrounding the principal settlements observed above. Although these areas contain some people who cannot overcome this by wealth the information of overall Scottish Index of Multiple Deprivation and median house prices show that the most affluent have made a lifestyle choice about where to live and in so doing have made themselves more geographically access deprived. They have overcome this by using their incomes to travel by car to overcome the access constraints. Nevertheless it reinforces the importance of good quality homes and neighbourhoods being available in places which reduce the need to travel to access, jobs, services and facilities.

Figure 52: Comparison of the data zones within the TAYplan area ranked amongst Scotland's 20% most deprived and 20% least deprived of geographical access (2012)



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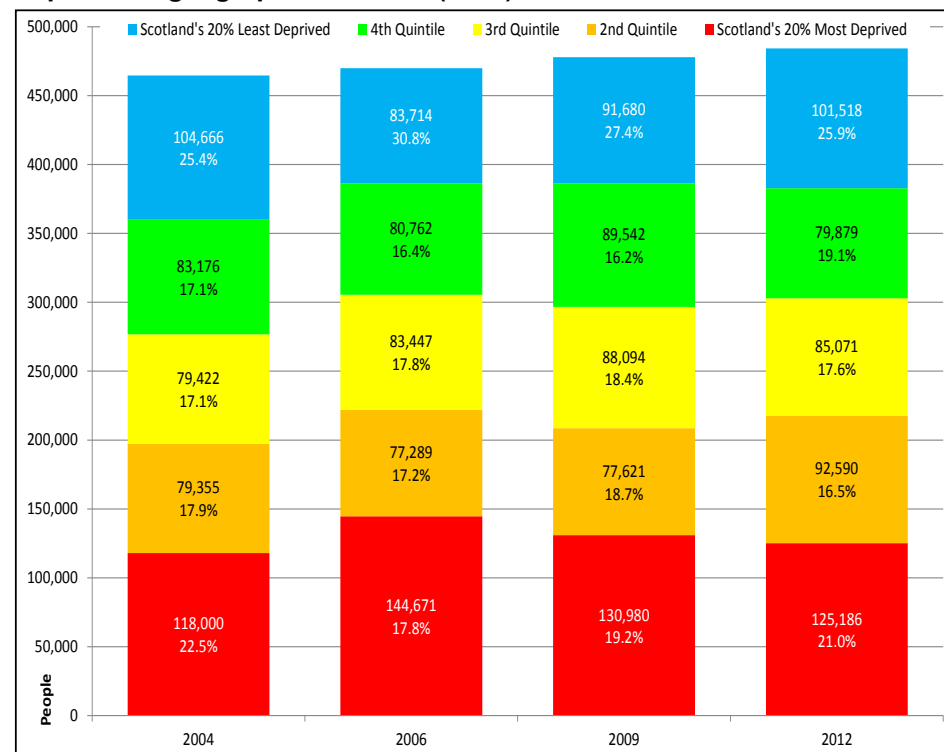
Source: Scottish Index of Multiple Deprivation 2012 Geographical Access Domain

3.43 Figure 53, however, shows that since 2006 the proportion of the population living in areas ranked amongst Scotland's 20% most geographically access deprived fell. It is not possible to say whether this fall has resulted from a reduction in house building and a fall in house moves since the credit crunch or from other factors. But in 2012 these represented a larger number but slightly smaller proportion of the TAYplan area population than in 2004.

Overall

3.44 This information suggests that place quality perceptions play a significant role in the choices made about where to live. It also shows that choices made to live in the areas surrounding the region's principal settlements can increase the population living in areas ranked amongst Scotland's 20% most geographically access deprived. This suggests that the location priorities set out in approved TAYplan (2012) Policies 1, 3,

Figure 53: Changes in the population living within the TAYplan area in data zones ranked amongst Scotland's 20% most deprived and 20% least deprived of geographical access (2012)



Source: Scottish Index of Multiple Deprivation 2012 Geographical Access Domain

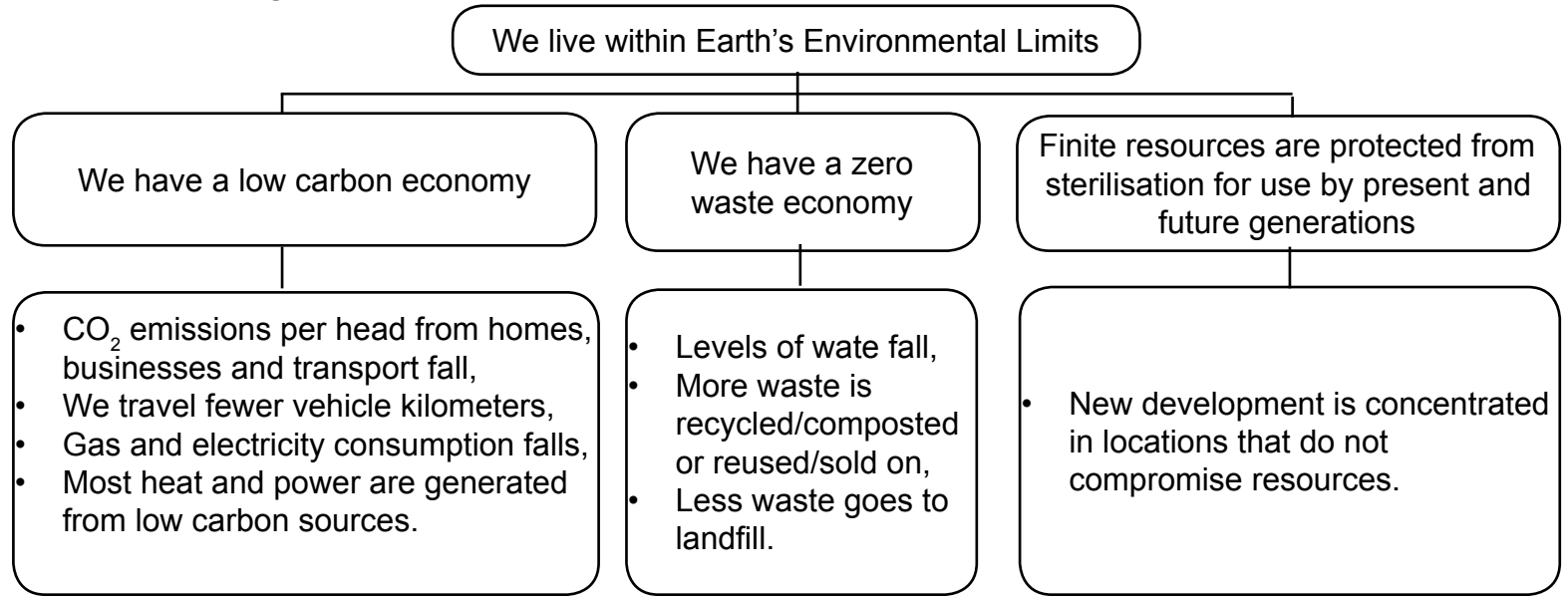
4, 5 and 7 remain appropriate but that the place shaping approach advocated in Policies 2 and 8 needs to be implemented more fully over the coming years. Policies 2 and 8 in particular will continue to be important in the delivery of new infrastructure that is needed to support new development. These conclusions are also reflected by the *TAYplan-wide Joint Housing Need and Demand Assessment* (2013).

Intermediate Outcome: We live within Earth's Environmental Limits

Introduction

4.0 If people are to have a better quality of life we must all live within Earth's environmental limits to avoid irrevocable damage to the very systems that enable humans and other species to survive. People's efforts to mitigate against climate change and the ways people consume and dispose of resources all affect whether they live within Earth's environmental limits. The outcome diagram right and the indicators table overleaf set out the areas that are being examined in this monitoring statement and the indicators being using.

Outcome Flow Diagram



Progress towards this outcome

	<p>Gas and electricity consumption has fallen, more electricity is generated from renewable sources and people are driving fewer kilometres but our economy and society are still heavily reliant on gas and petroleum for heat and travel. This reflects the intended direction to a low carbon economy and place sought by the approved TAYplan (2012) Policies 1, 2, 3 and 6. The challenge for future years will be the decarbonisation of heat and transport will be essential if we are to meet the requirements of the Climate Change (Scotland) Act 2009.</p>	<p>intended direction of approved TAYplan (2012) Policies 2 and 6, but there is still more to be done to meet the Zero Waste Scotland targets.</p>
	<p>Waste levels have fallen and more waste is being diverted from land fill to resale/reuse and to recycling and composting. This reflects the</p>	<p>The strategy of focussing the majority of new development in principal settlements has been largely successful and has reduced the risk to resources such as carbon rich soils being adversely affected by development. But the challenge continues to be the tension between the need to concentrate development in principal settlements to reflect the approved TAYplan (2012) Policy 1 versus the use of land in these locations which is amongst the most productive for agriculture protected by Policy 3.</p>

Table of Indicators

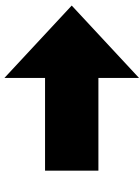
Sub-Outcome	Indicator	Source	Rationale
We have moved to a low carbon economy.	Carbon Dioxide Emissions Per Capita.	Department for Energy and Climate Change	These indicators collectively tell us about how we consume energy and our carbon emission impacts. These show information as average per capita or per meter figures which avoid the impacts of different sizes of population for each local authority.
	Final Energy Consumption.		
	Thousand vehicle Kilometres travelled per capita.	Scottish Transport Statistics	
	Average domestic and non-domestic gas and electricity consumption per meter.	Department for Energy and Climate Change	
	Power generation and generating capacity		
We have moved to a zero waste economy.	Total waste arising	Scottish Environment Protection Agency (SEPA)	These indicators collectively tell us about how much waste we throw away, where it originates and how we treat it. Overall this tells us about progress towards the targets set out in the Scottish Zero Waste Plan (2009).
	Kilograms of Municipal Solid Waste per capita.		
	Municipal Solid Waste by treatment.		
	Proportion of waste recycled or composted.		
Finite resources.	Soil Carbon Content.	James Hutton Institute	These indicators help us to understand how development has broadly impacted on these resource assets.
	Agricultural Land Classification.		
	Arboreal Land Classification.		

Sub-Outcome: We have moved to a low carbon economy

What: A low carbon economy is one where people have a more limited reliance on fossil fuels (such as coal, oil, gas) to produce energy for heat, power and transport, and as a result greenhouse gas emissions, including carbon dioxide (CO₂), fall.

How: Approved TAYplan (2012) Policies 1 and 2 ensure that the location, design and layout of development reduces the need to consume fossil fuels for heat and power whilst sourcing more heat and power from low and zero carbon alternatives. Approved TAYplan (2012) Policy 1 also seeks to locate development in places which minimise the need to travel to access jobs, services and facilities and to enable low carbon alternatives to the car to be used. This includes providing a locational framework in Policy 6 for energy and other infrastructure that will support the decarbonisation of heat, transport and electricity. Besides the Plan there are numerous choices/behaviours that will bring about a reduction in consumption such as insulation and switching off; and, an increase the use of energy from low carbon sources such as decisions about how to travel. These rely on the market choices made by businesses and individuals in the market.

Progress towards this outcome



CO₂ emissions and the consumption of energy are falling. There has also been an increase in electricity generation from low carbon sources. However, substantial progress still needs to be made in the decarbonisation of heat and transport in order to shift to a low carbon economy.

Per capita carbon dioxide emissions fall

4.1 It must also be recognised that the Carbon Dioxide (CO₂) emissions in Figure 54 only include road transport and therefore do not reflect the full carbon footprint associated with foreign travel by air and imports and exports by air and sea. Nor do these figures account for imported products that are manufactured overseas but upon which our society is (or chooses to be) reliant. In other words these figures understate our actual carbon emissions because we are part of a global system.

4.2 Between 2005 and 2010 per capita CO₂ emissions fell in all four TAYplan council areas, reflecting similar trends for Scotland and the UK (Figure 54). Although the economic downturn may have partly contributed, this is part of a trend which pre-dates 2008 reflecting a mixture of measures to tackle climate change and reduce fuel costs.

Still reliant on gas and petroleum

4.3 There has been strong movement towards the decarbonisation of the electricity sector with growth in generation from renewable sources (Figure 55). However, Figure 56 shows that the years 2005 to 2010 (and likely before) have been dominated by the consumption of gas and petroleum products in the domestic, industrial and transport sectors. It is this continued reliance on gas and petroleum products which consistently and collectively accounts for around 75-90% of total energy consumption (dependent on area). This illustrates the

significance and importance of the twin agendas - to decarbonise transport and to decarbonise heat, compared with electricity. The approach to location, design and layout of development advocated in the approved TAYplan (2012) continue to be appropriate to support this.

Domestic gas and electricity, and non-domestic electricity consumption fall

4.4 More detailed examination shows a fall in average per meter consumption of domestic and non-domestic electricity and domestic gas (Figures 57 and 58). There are numerous reasons for this which include winter temperatures and responses to fuel prices. However, measures such as stricter building regulations and planning requirements for new buildings as well as subsidised loft insulation and energy efficient boilers have contributed to shrinking gas consumption in particular. This has had a complementary effect on CO₂ emissions. Similarly better knowledge and the price of energy have also motivated people to behave in ways that reduce consumption and to use efficient equipment. Non domestic gas consumption has fluctuated. This can vary because some businesses behave in a similar way to domestic properties but others require energy for industrial processes e.g. drying or heating.

Domestic emissions fall	<p>Although domestic emissions per capita are broadly similar across TAYplan councils and Scotland there are some variations. In Angus and Perth & Kinross higher per capita emissions may be because many homes in these areas are not connected to the gas network and are reliant on less efficient Economy 7 heating systems. Slightly higher temperatures for the rest of the UK compared with Scotland may also influence the slightly lower per capita emissions from homes as a UK average.</p>
Transport Emissions fall	<p>Road Transport emissions have fallen across all areas by a similar amount, approximately 0.1 tonnes per capita. This could reflect improvements in engine design by manufacturers but is also likely to reflect travel choices made by individuals and businesses. Figure 59 shows that vehicle kilometres travelled per capita has levelled, and in some cases fallen slightly. It is unclear to what extent this reflects the economic downturn or if it is due to a wider trend that would outlive this.</p> <p>Higher transport emissions per capita are seen in Perth & Kinross and Angus. This is understood to be for two reasons:</p> <ol style="list-style-type: none"> 1. These are large rural areas made up of numerous small settlements meaning that the population is structurally reliant on car travel to access jobs, services and facilities; 2. These areas are both home to major national routes (M90, A90 and A9). More detailed analysis of vehicle kilometres shows that these routes account for a large share. Therefore, although the emissions originate within these areas they are the result of national traffic between North East Scotland, the Highlands, the rest of Scotland and the UK using these areas for transit. <p>In Perth & Kinross transport emissions per capita have fallen substantially since 2005 and in particular since 2008. This could reflect the impacts of the economic down turn on national traffic.</p> <p>Distances travelled by road appear to have plateaued and then fallen slightly. However, pre-recession decline in car traffic is partly due to changes in company car taxation. If the company car components of average car mileage per person are discounted then, outside London, private car mileage per person continued to grow until the onset of the recession.</p>
Industrial and Commercial Emissions fall	<p>In most instances industrial and commercial CO₂ emissions have fallen by the most significant amount and most notably since 2008. This strongly suggests that the economic downturn has played a major role influencing energy consumption, with cost as the likely driver.</p> <p>Fife presents the exception, where a rise can be seen in 2010; this was after a big drop in 2009, the reasons for which are largely unclear. However climatic conditions (a particularly harsh winter) could have had influence on this drop in 2009, with gas supply being prioritised for domestic use, or to preserve the baseline supply. Increase in gas prices, and the global financial downturn could equally have played a part. In Fife the usage of petroleum based products (Figure 56) in industry & commercial uses from 2008 has almost doubled. Perhaps this is because it is comparatively cheaper price is more widely availability. This could be because petroleum products have been used to replace gas, perhaps due to cost, or another explanation.</p> <p>Fife has almost double the emissions per capita compared with the other areas. This may be explained by the presence of major industrial facilities such as Mossmorran Petrochemical Plant and Longannet Coal Power Station, both of which are out with the TAYplan area.</p> <p>Since 2007/08 there has been a significant drop across the board in commercial and industrial emissions. This is possibly due to recession and a more conscious effort to reduce carbon footprints.</p> <p>Angus, Dundee City and Perth & Kinross per capita CO₂ emissions are all below UK and Scotland levels. But it must be recognised that the Scotland figures include major thermal power plants and petrochemical/oil refineries of national significance that use considerable energy but which are not located within TAYplan.</p>

Figure 54: Local Carbon Dioxide Emissions per Capita split by Transport, Domestic and Industrial/Commercial Sectors (tonnes of CO₂ 2005 to 2010)

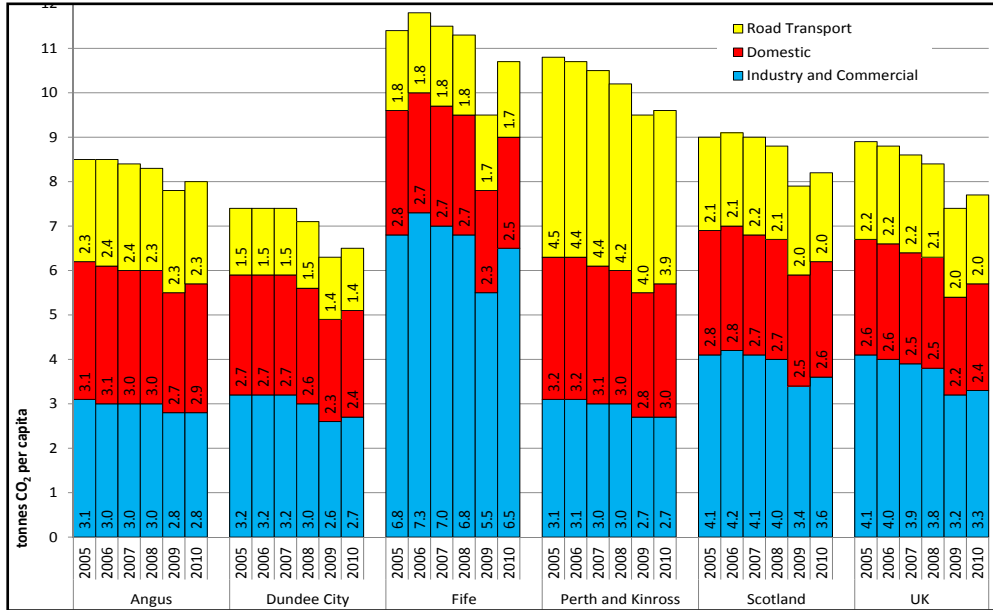
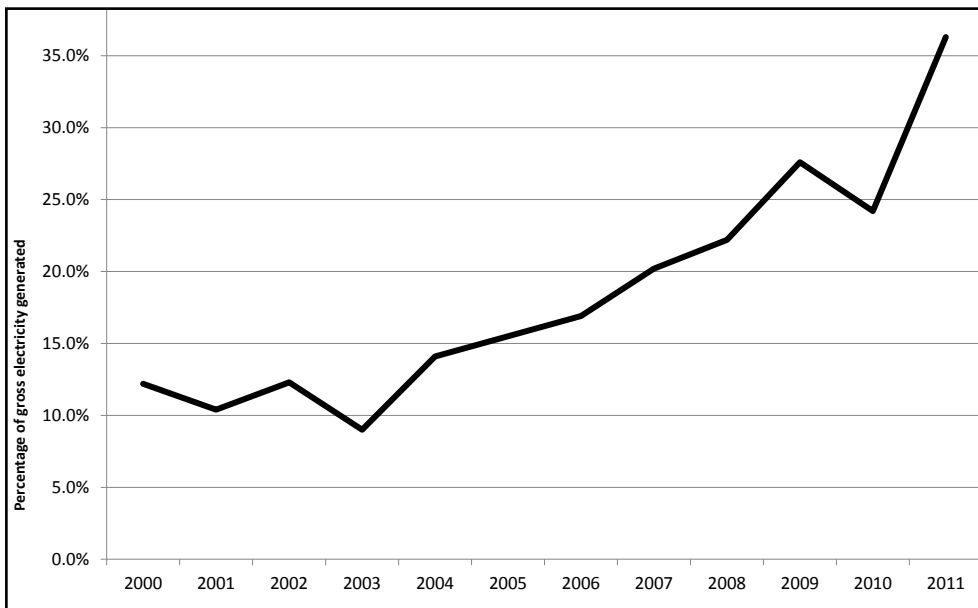
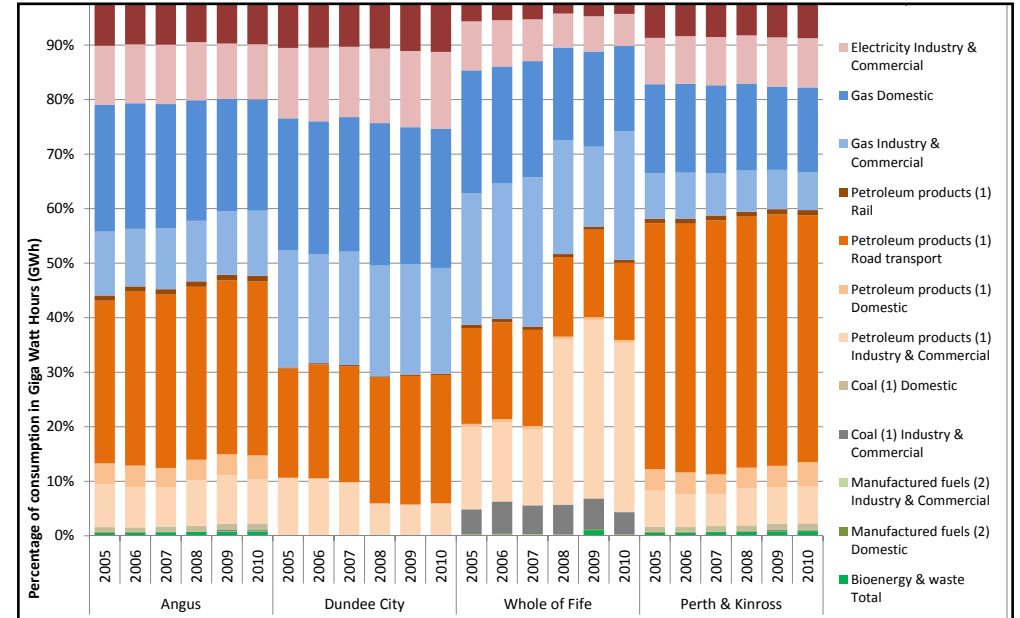


Figure 55: Percentage of Gross Electricity Generation from renewable sources in Scotland 2000 to 2011



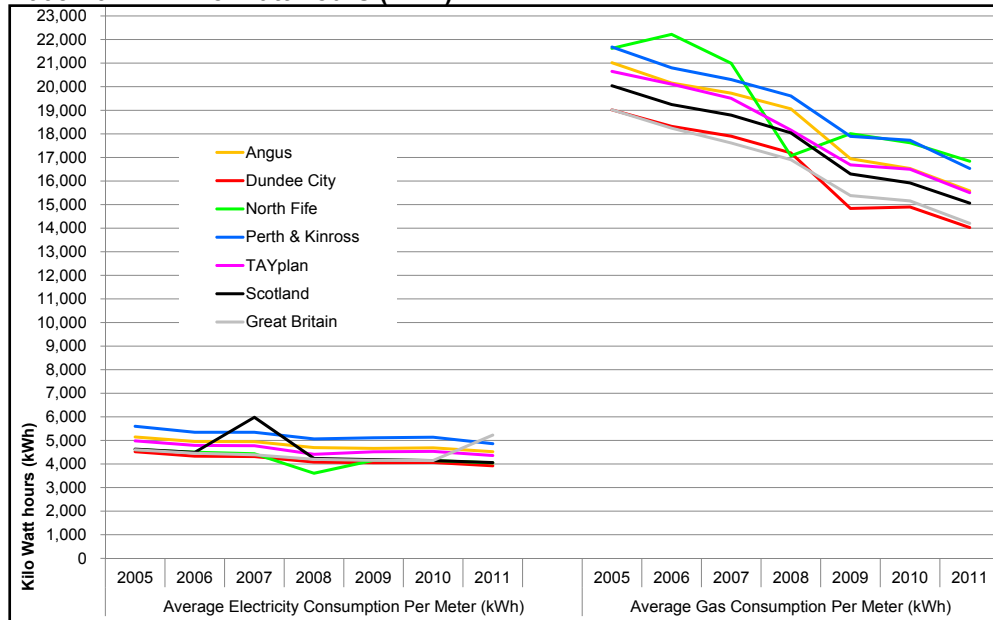
Note: (1) Hydro excludes electricity generated from hydro - pumped storage. (2) Other biofuels includes biofuels co-fired with fossil fuels and sewage gas. (3) Prior to 2010, solar photovoltaics were only estimated on a UK-wide basis and could not be allocated to regions within the UK.

Figure 56: Proportional Split of Final Energy Consumption by Local Authority and Source (2005 to 2010 in Giga Watt hours)



Source (Figures 1, 2 and 3): Department for Energy and Climate Change (DECC) Local Carbon Emissions
 Note: (1) Includes coal/petroleum (as appropriate) consumed in all the following sectors: Heat Generation, Energy Industry use, Industry, Public administration, Commercial, Agriculture, Miscellaneous (2) Includes only manufactured solid fuels and not derived gases

Figure 57: Average Annual Domestic Gas and Electricity Consumption Per Meter 2005-2011 in Kilo Watt hours (kWh)



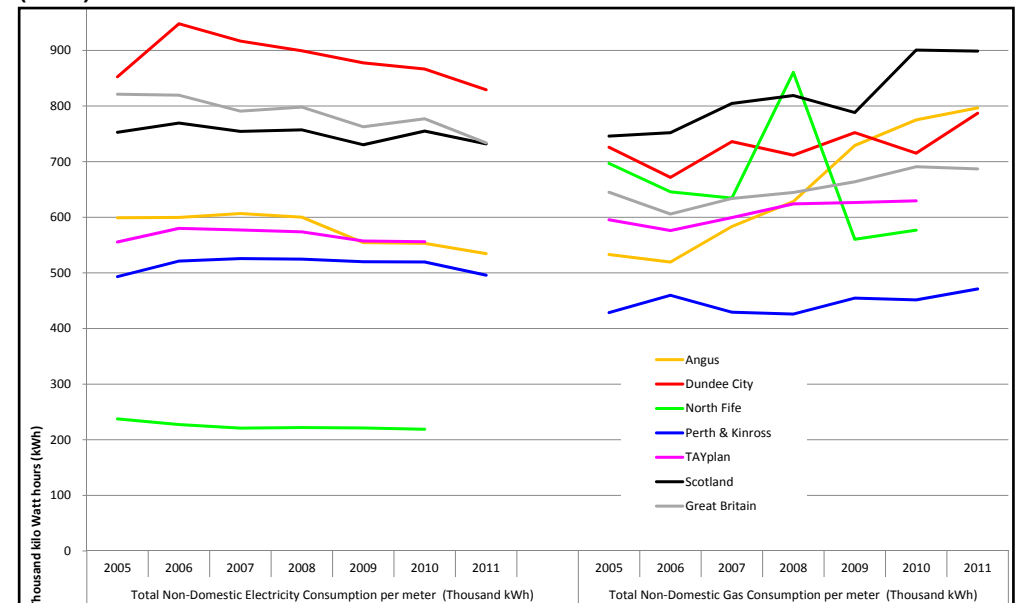
Source: Department for Energy and Climate Change (DECC) Sub-national Gas and Electricity Consumption
 Note: Figures for North Fife (and therefore TAYplan area) only available to 2010

Overall

4.5 This information suggests that the intentions of approved TAYplan (2012) Policies 1 and 2 to reduce energy consumption through the location, design and layout of development have been in part successful. This is because the role of factors such as insulation, efficient appliances, ‘switching off’ and other behavioural changes have also played an important role. Approved TAYplan (2012).

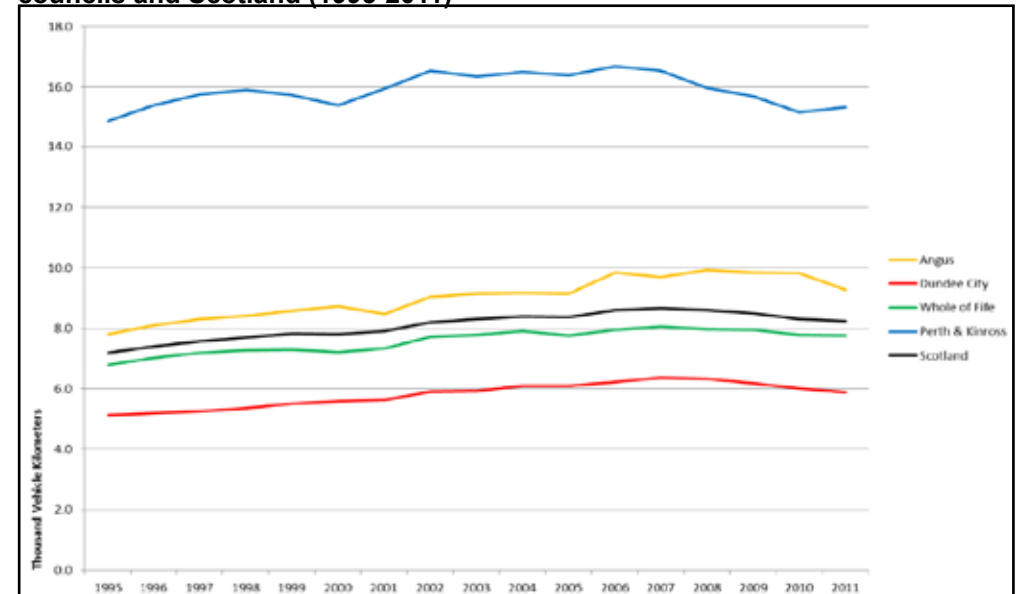
4.6 Policy 6 also sets out the decision making framework to support the delivery of a shift to low carbon heat and power. Although there has been a shift at Scotland level to more renewable electricity less information is not available at TAYplan level for heat or power. But it is clear that the outcome sought is being achieved, albeit with more work needed. The principles of approved TAYplan (2012) Policy 6 remain appropriate but their relative success will require more detailed analysis of information which covers more of the time period for the operational TAYplan i.e. post 2012.

Figure 58: Non-Domestic Gas and Electricity Consumption in TAYplan and its authorities, Scotland and Great Britain 2005 to 2011 in Thousand kilo Watt hours (kWh)



Note: Figures for North Fife (and therefore TAYplan area) only available to 2010

Figure 59: Thousand vehicle Kilometres travelled per capita for TAYplan councils and Scotland (1995-2011)



Source: Scottish Transport Statistics

Sub-Outcome: We have moved to a zero waste economy

What: A zero waste economy is defined by the Scotland Zero Waste Plan as one which sees less waste being produced and any waste being diverted to alternative means of treatment so that landfill represents no more than 5% of all waste treatment, a minimum of 70% of waste is recycled or composted and incineration rates are capped at 25%. The target is to achieve this by 2020.

How: The approved TAYplan (2012) Policy 2 ensures that any new development is designed and built in a way which allows its occupants to participate and deliver the objectives of the Zero Waste Plan e.g. the storage of separated waste prior to collection. Policy 6 sets out a locational framework for waste management infrastructure and to support the reuse of surplus heat and other products in industrial processes. But the delivery of a zero waste economy also hinges on the choices made by people and businesses, and, also public and private organisations that collect, treat and dispose of waste or sell on bi-products.

Progress towards this outcome



Substantial progress has been made to reduce overall levels of waste and to direct treatment away from landfill to recycling/composting. Although this reflects the approach advocated in the approved TAYplan (2012), more waste still needs to be diverted away from landfill.

Categories of Waste

There are two broad categories of waste that we produce. The first is household waste that is produced by homes. This typically represents about a quarter to a third of all waste. The other is commercial and industrial, and building and demolition waste, which typically represents about two thirds to three quarters of all waste. This includes anything from waste from shops and offices (very similar to household waste) to hazardous industrial waste and materials like rubble from the building industry.

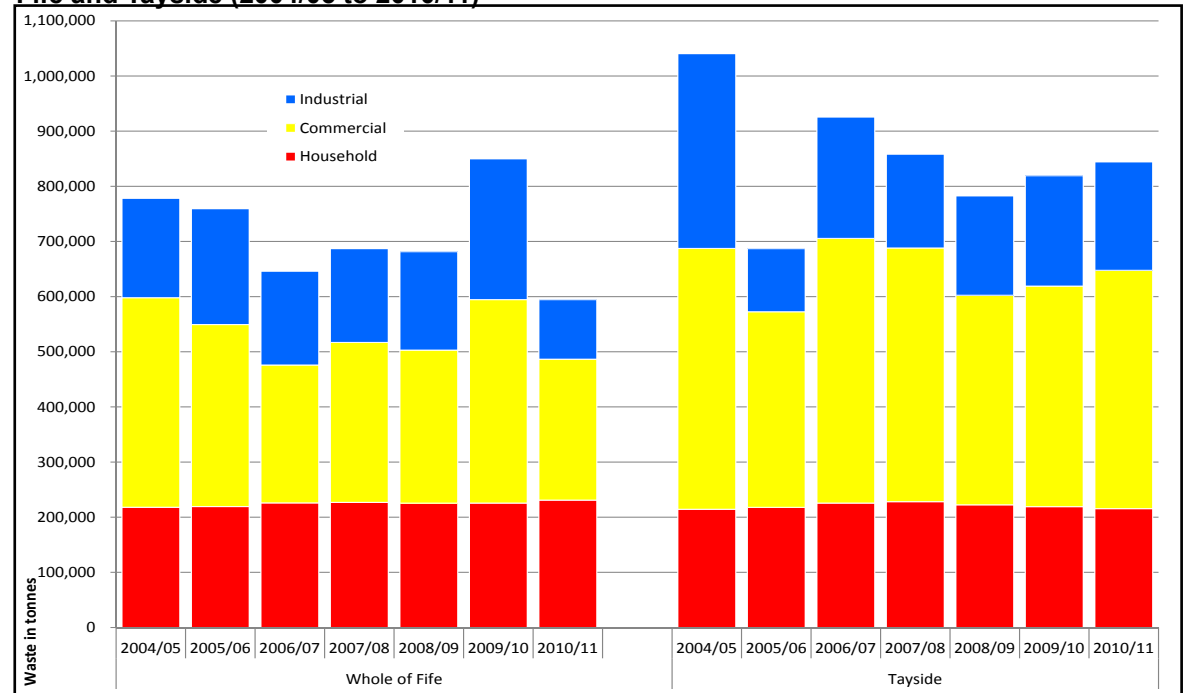
Falls in the amount of all types of waste produced

4.7 Over the last decade the amount of waste produced has fallen, albeit with some fluctuations. However, all four authorities still see disposal of more waste per capita than the Scotland average (Figures 60 and 61).

4.8 Numerous factors have contributed to waste reduction and these include: greater awareness, packaging, home composting and greater avoidance of waste through reuse or resale through charity/second

hand shops and websites e.g. freecycle, Gumtree and Ebay. However, the Development Plan system must continue to understand these trends in order to plan for the appropriate scale of infrastructure to sort, handle, store, transfer and process waste.

Figure 60: Total waste arising (tonnes) for all types of waste for the whole of Fife and Tayside (2004/05 to 2010/11)



Source: Scottish Environment Protection Agency (SEPA)

4.9 Municipal Solid Waste (MSW) refers to household and some commercial waste that is collected by or on behalf of Local Authorities. Per capita levels of MSW have been calculated using the 2011 census data.

4.10 Despite an overall drop in kilos of MSW per capita in all four TAYplan authorities these levels remain above the Scottish average. Perth & Kinross has seen the most substantial transition from a position of growing per capita MSW up to 2006/07 followed by a very marked drop falling to below the levels of all other authorities. Although the time of transition commencing corresponds broadly with the global economic downturn it is not clear to what extent this is the reason for the drop.

Landfill rates fall and recycling and composting rates grow

4.11 Treatment methods for waste are influenced by the choices of people and businesses about how they dispose of their waste, the collection services available and of the availability and capacity of infrastructure capable of handling, storing, transferring and processing waste.

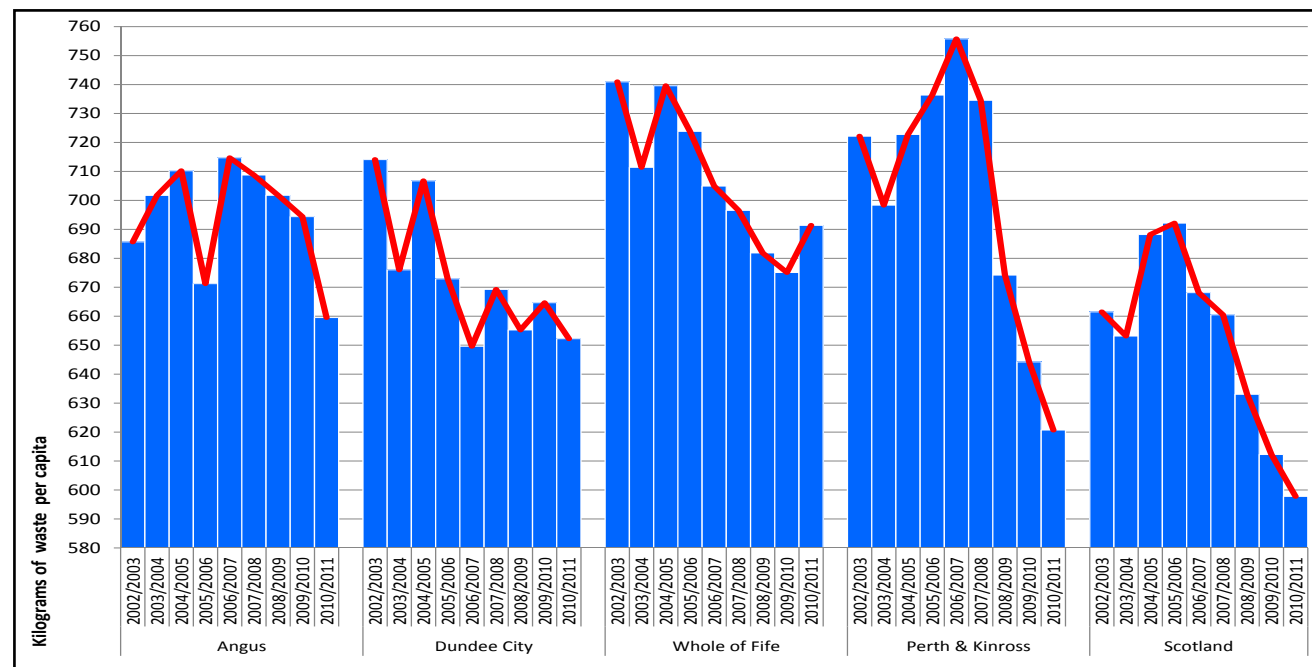
4.12 Recycling and composting rates for Municipal Solid Waste have increased in all four TAYplan council areas and almost consistently exceeded the Scottish average. However, there is still some way to go to meet the Zero Waste Plan targets; a minimum of 70% of waste is recycled or composted (Figures 62 and 63). Figure 63 shows that composting rates have grown more significantly in recent years; perhaps reflecting an introduction of garden waste collections for domestic properties. This also suggests that

between 25% and 30% of municipal solid waste still needs to be diverted from landfill to compost or recycling in order to meet the Zero Waste Plan targets based on present levels of waste. According to the SEPA Zero Waste Plan (2009) Annex B Regional Capacity Table (Dec 2011) this is equivalent to 270,000 tonnes of waste for the TAYplan area each year. Present infrastructure is understood to be capable of handling this additional capacity and issues relate to means of collection, handling and processing rather than specific infrastructure.

4.13 Similarly landfill rates have fallen as overall waste levels have also fallen and as waste has been diverted to other methods of treatment.

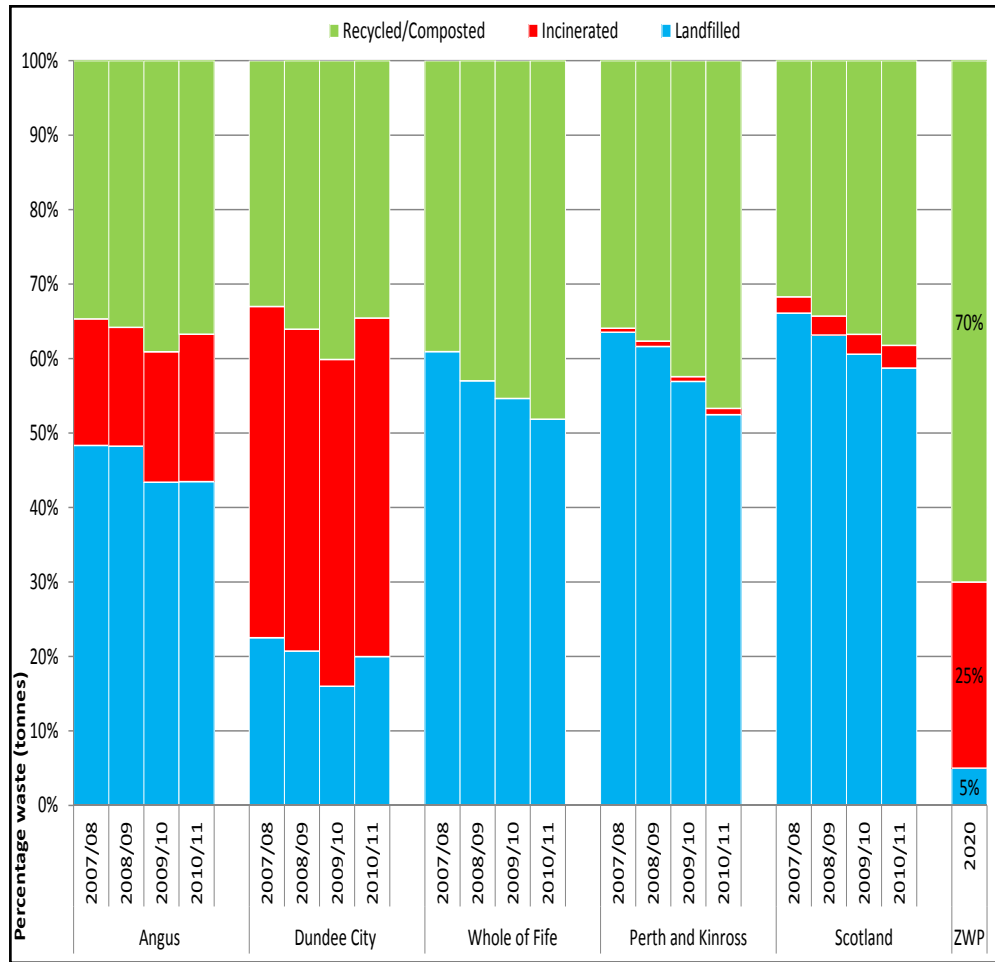
However significant progress still has to be made to reach the maximum 5% target. Dundee City is the closest of the four areas to reaching this target. However, this may be because waste that would otherwise have gone to landfill is instead incinerated at Dundee's Waste to Energy Plant - DERL. Similarly a smaller but notable share of Angus MSW is also incinerated. Presently Dundee City exceeds the maximum 25% incineration target from the Zero Waste Plan.

Figure 61: Kilograms of municipal solid waste collected per capita (2002/03 to 2010/11)



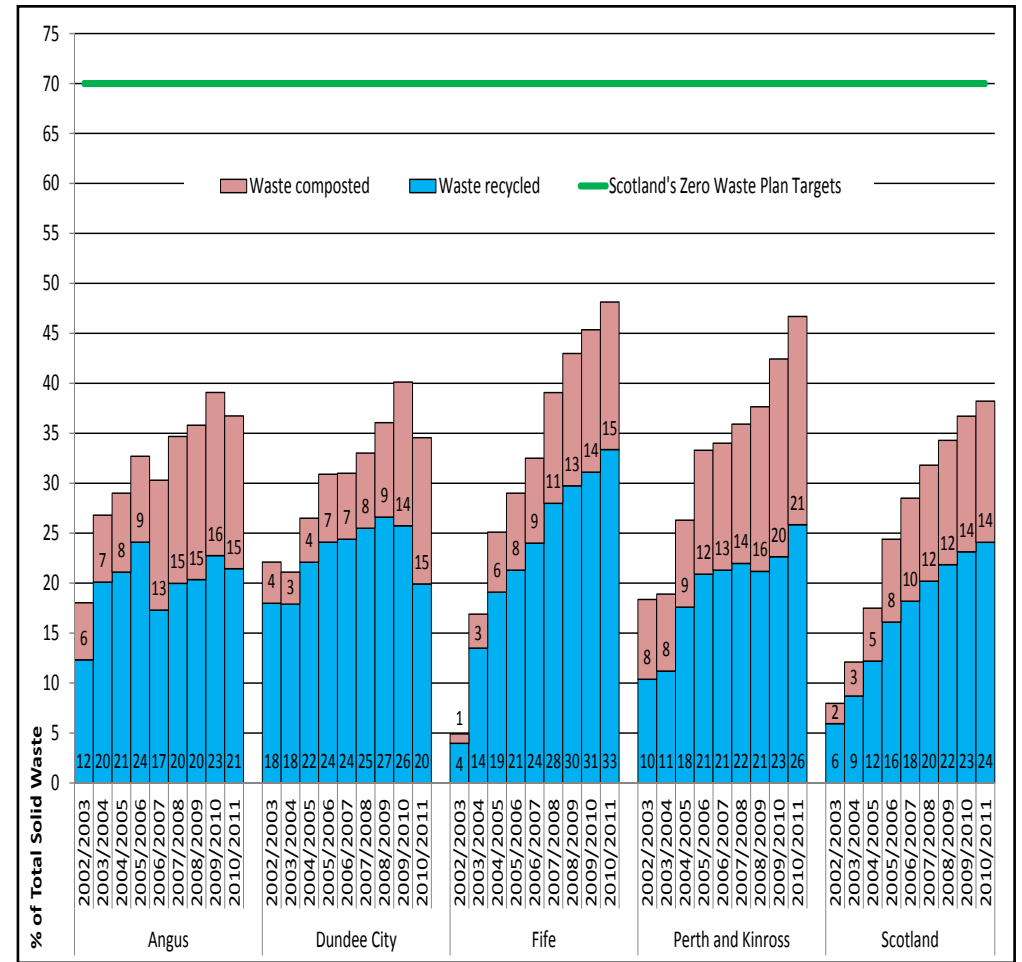
Source: Scottish Environment Protection Agency (SEPA)

Figure 62: Municipal solid waste by treatment (2002/03 to 2010/11)



Source: Scottish Environment Protection Agency (SEPA)

Figure 63: Municipal solid waste recycled and composted (2002/03 to 2010/11)



Source: Scottish Environment Protection Agency (SEPA)

Overall

4.14 The reduction in overall waste and changes to disposal methods reflect the intended result of approved TAYplan (2012) Policy 2D which aims for development to incorporate space to support storage of separate waste prior to collection. However, it must be recognised that this alone does not account for all of the changes. These have been brought about by legislative changes

making it illegal to dispose of dry recyclate to landfill, improvements in waste sorting by households and businesses and a growing market for second hand goods.

4.15 Approved TAYplan (2012) Policy 6 sets out the decision making framework for the location of waste and resource management infrastructure to support the switch to zero waste. As with energy

infrastructure (above), more information from a time period post 2012 is needed to evaluate the success of Policy 6. It must also be appreciated that existing infrastructure capacity can be utilised or expanded in situ. This may bring new facilities or improvements to treatments without the need for new sites.

Sub-Outcome: Finite resources are protected from sterilisation for use by present and future generations

What: Finite resources include carbon rich soils and land suitable for forestry, arable farming. These are important to resource security for TAYplan but also for Scotland and the UK. Additionally these areas also provide a contribution to the economy through food and timber production or act as habitats and storage for carbon and water.

How: The approved TAYplan Policies 1 and 3 ensure a pattern of development that avoids damage to economically important minerals and other finite resources such as carbon rich soils and land suitable for forestry, arable farming. The location priorities in Policy 1 and management of assets in Policy 3 jointly direct development to locations which avoid compromising these resources and require Local Development Plans and development proposals to consider such resources in determining where development should and should not go.

Progress towards this outcome



The majority of new housing and employment uses have been built in principal settlements. These are located away from carbon rich soils, which are largely concentrated in the west and north of the region. Prime agricultural land (classes 1, 2 and 3a) and land most suited to forestry tends to be the same land. Generally arable farming tends to be the dominant choice although this is not a land use planning matter.

Much of this land surrounds the region's principal settlements presenting challenges when accommodating development. For the most the development has taken place within principal settlements but the approved TAYplan (2012) approach to balance development needs with the importance of prime agricultural land remains appropriate.

4.16 The approved TAYplan (2012) strategy focuses the majority of new development in principal settlements. According to the 'We live, work and play in better quality environments' section of this Monitoring Statement the majority of housing development has taken place in principal settlements. This points to the strategy having successfully avoided significant development in areas where there are carbon rich soils (Figure 64). Safeguarding these areas means minimising the release of stored carbon dioxide into the atmosphere and stored water back into the river network. However, it is important to remember that this is only one part of the story and that land management practices will also have a substantial role to play in preserving these carbon rich soils. But this indicates that the present strategy remains appropriate.

4.17 Figure 65 highlights the presence of prime agricultural land in the TAYplan region, and indicates its close proximity to the principal settlements. This is likely to be because towns were established and grew in areas where the population could cultivate the land. However this proximity continues to present significant challenge in securing the land for agriculture use over development, particularly on the edge of settlements.

4.18 Figure 66 shows the areas which

are best suited for forestry. These areas are broadly the same as those best suited to arable farming, and are also lowest in carbon richness. This has led to agriculture being prioritised and so generally areas of forestry lie within the areas where the soil quality for arable farming is poorer (classes 3b to 7).

4.19 In the case of land used for forestry this also tends to be in locations least suited to agriculture and away from principal settlements. For prime agricultural land (classes 1, 2 and 3a) the challenge continues to be about delivering a strategy which concentrates development in principal settlements when the majority of principal settlements are surrounded by some of the most productive land.

4.20 The present approach in approved TAYplan (2012) Policies 1 and 3 requires a balanced view and value judgements to be made prior to allocating sites for development in Local Development Plans. This approach remains logical and appropriate given the numerous additional factors that must be considered. However, on balance the approach set out in Policy 1 appears to have been successful in focussing most development in places that present the least risk to important finite resources.

Figure 64: Soil Carbon Content

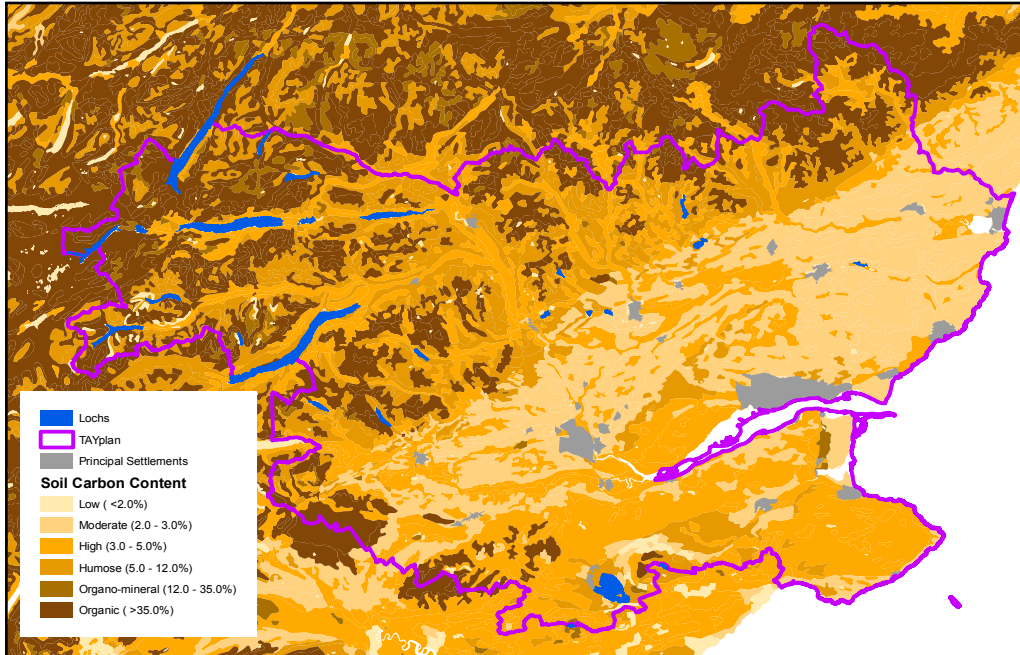


Figure 66: Forest Land Classification

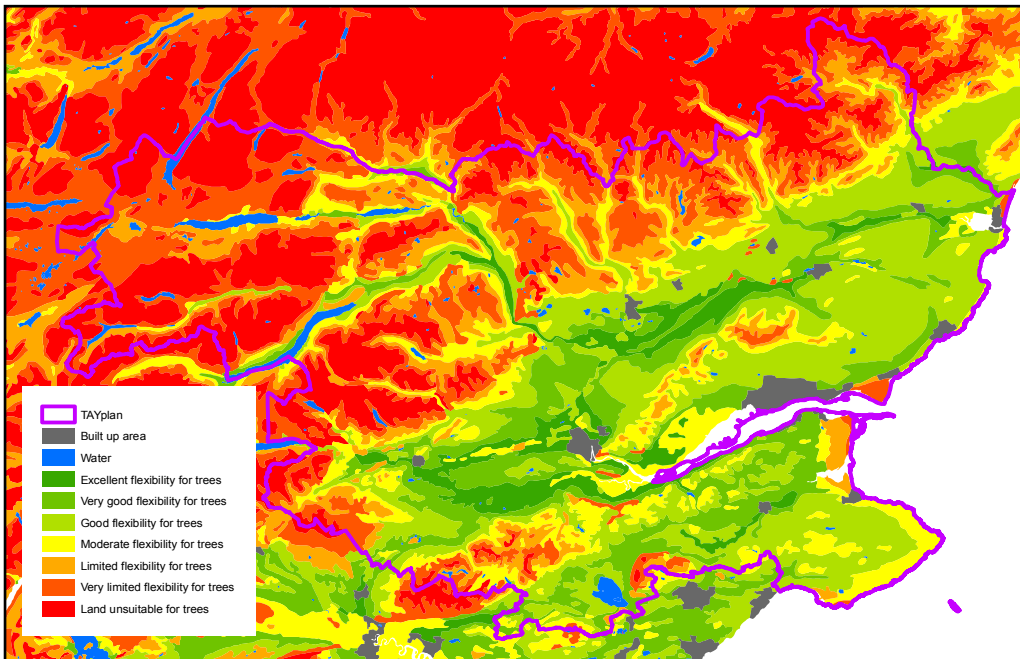
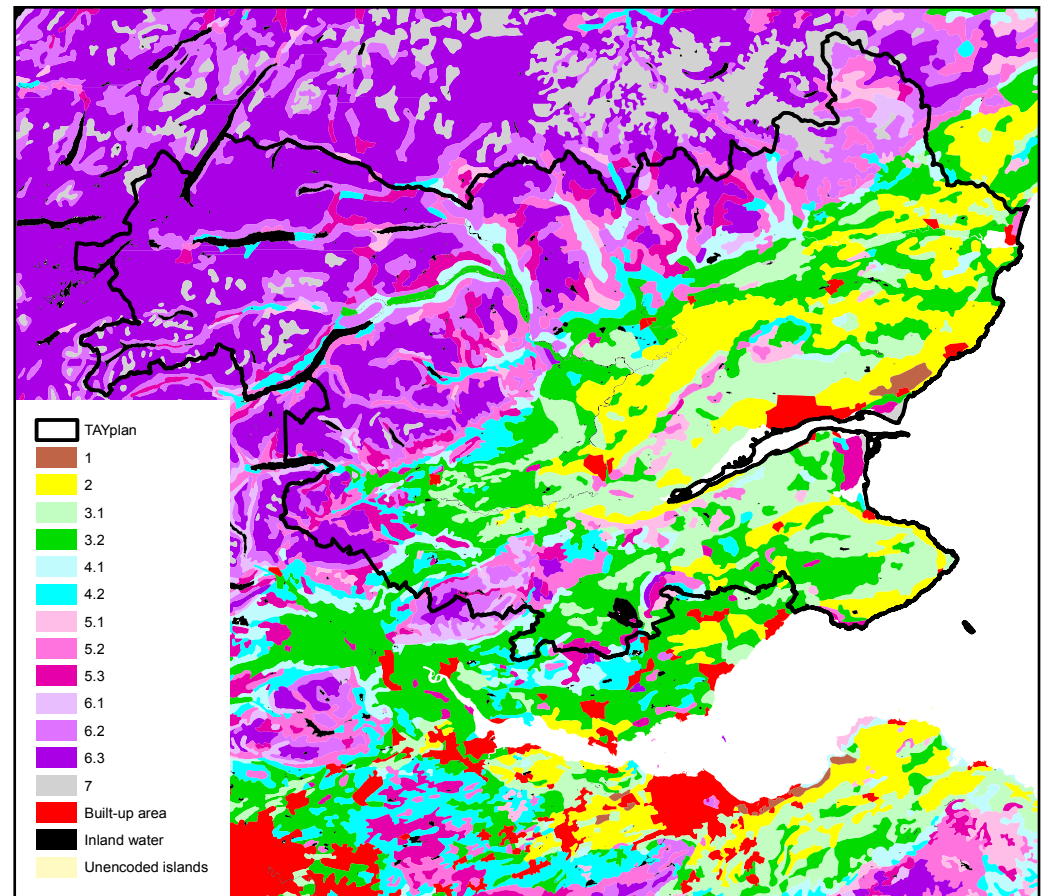


Figure 65: Agricultural Land Classification



All three maps Source: James Hutton Institute

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Overall

4.21 This information shows the broad impacts on the intended consequences of approved TAYplan (2012) Policies 1 and 3. In particular the common result of the majority of new development having taken place in principal settlements to fulfil Policy 1 has also fulfilled Policy 3 in that it has avoided locations of carbon rich soils. But this also illustrates the challenge posed by the proximity of prime agricultural and forestry land to principal settlements. This requires a balance of competing priorities and the approved TAYplan (2012) requires such consideration through Policies 1 and 3. Future monitoring statements will benefit from more post 2012 information and consideration of more detail if appropriate.

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