

Future Trends for Swansea -

Background Paper

(Last Update on 24th September 2014)

Prepared by the Sustainable Development Unit, City and County of Swansea

This paper is a regularly updated working document that offers an insight into our current understanding of future trends likely to impact the planning and delivery of Council Services. The trends identified are based on sound evidence and statistics referenced from credible sources of intelligence. However the information presented is not absolute or certain but rather intended to provide a reflection of wider visions of a probable future based on current drivers. Trends have been sourced from a variety of global, national and local contexts and were selected for the relevance of the impact on City and County of Swansea Services.



City and County of
Swansea

Topics:

- 1. Demographics**
- 2. Health and Social Care**
- 3. Poverty and Deprivation**
- 4. Housing**
- 5. Education and Skills**
- 6. Infrastructure and Energy**
- 7. Natural Resources and Environment**
- 8. Climate Change Adaptation**
- 9. Economy and Employment**
- 10. Community Safety**
- 11. Technology**
- 12. Culture and Heritage**

Demographics

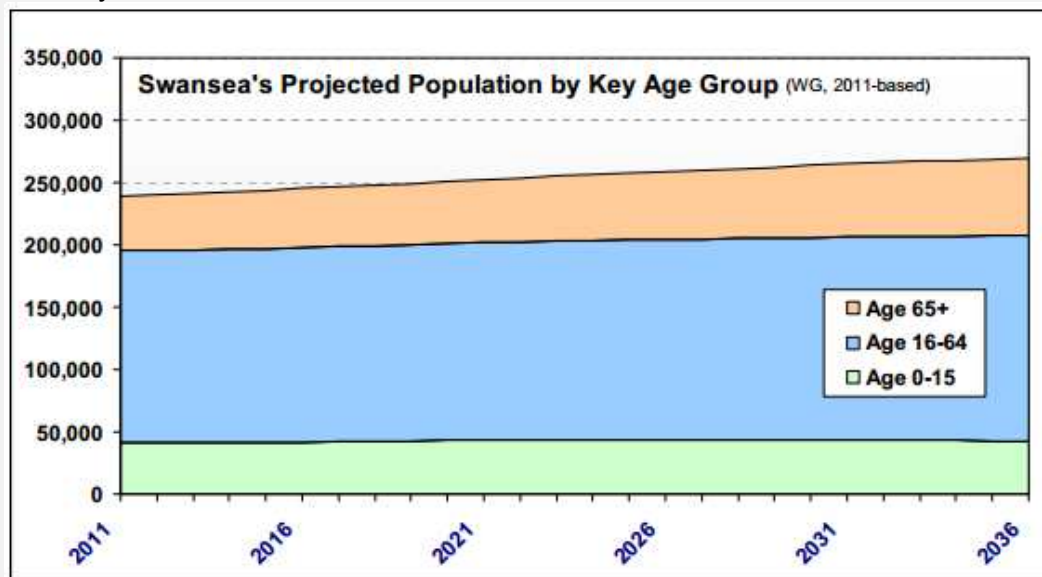
Trends

Overall projections

- The rise in world population is likely to plateau at about 9 billion by 2050.¹
- The total population of Swansea is projected to increase by 13.1%, from 238,700 in 2011 to 269,900 in 2036.²
- On average, the population of Swansea is projected to increase by 0.5% (1,250) per annum between 2011 and 2036.³
- With an additional 31,200 people over 25 years, Swansea has the second highest projected level of growth in Wales, exceeded only by Cardiff.⁴

Ageing Population

- A key trend affecting Wales by 2050 will be the ageing population.⁵
- The number of people in Swansea aged 65 and over is projected to increase at an average annual growth rate of 1.8% (around 760 people per year) to 62,000. This represents an overall increase of 19,000 or 44.1% between 2011 and 2036, with a doubling of the number of people aged >85 years. Managing older people's health and social care needs effectively will be very important.⁶
- The number of children (0-15) in Swansea is predicted to increase by only 3.5% over the same period and the number of working age people (16-64) will rise by 7%.⁷



Source: Welsh Government 2011-based local authority population projections, July 2013.

- Frailty amongst the over 65s is predicted to increase, due to a combination of predisposing factors (childhood development and lifestyle), followed by contributing factors such as physical inactivity, chronic disease, and anorexia/malnutrition in later adulthood.⁸

Total >65s			Est. of frail population			Frail per 1,000 >65
2012	2018	Change	2012	2018	Change	
44,290	49,396	+11.5%	4,687	5,226	+11.5%	106

- Life expectancy at birth in Swansea now stands at 77.6 years for males (Wales 78.2) and 82.2 for females (Wales 82.2).⁹
- The gap in life expectancy for males in Swansea between the most and least deprived fifth is about 12 years.¹⁰

Social trends

- Latest Welsh Government projections suggest that if recent (2006-11) trends were to continue, an estimated 18,850 net overseas migrants (around 750 per year) would be added to Swansea's population by 2036.¹¹
- On the same basis, an estimated 4,000 net UK migrants (160 per year) would arrive in Swansea by 2036.¹²
- Nearly 80% of the Wales projected population increase is expected to be directly or indirectly due to migration.¹³
- There is an increasing trend for one parent families, people living alone and co-habitation in Swansea.
 - Single person households are projected to grow by 44.5% from 34,500 in 2011 to 49,900 in 2036.
 - Single parent households are projected to increase by 27.9% from 7,300 in 2011 to 9,300 in 2036
 - Two adult, no children households are projected to rise by 4,200 from 30,600 in 2011 to 34,800 in 2036.¹⁴

Key questions for future service delivery

1. Are services being delivered by CCS fit for the future given the projected demographic trends?
2. What social changes might affect Swansea between now and 2040 and what challenges and opportunities might these present?
3. What impact will a 13.1% increase in the number of residents being served by CCS have on the capacity and resource of each service?
4. Given the potential for 18,850 new overseas migrants by 2036, what challenges and opportunities may this present for service delivery across the council?
5. What pressures will an ageing population place on funding for health care, social services and other departments?
6. In which service areas might CCS look to empower the elderly, utilise their skills and recognise their contributions to society – i.e. providing care, mentoring young entrepreneurs etc?
7. What challenges face CCS in trying to reduce the life-expectancy gap by 2040 and what actions should be taken to prevent the gap from widening?
8. What impact will an increase in one parent families/smaller household sizes/people living alone have on housing and social care?

Health and Social Care

Trends

Health Trends

- An increase of 21.3% is projected in the numbers of obese children and young people aged 2-17 by 2030.¹⁵
- There is expected to be an increase of 29.9% in the numbers of obese older people by 2030, with a sharper still increase in those aged 75+ (47.1%).¹⁶
- It is anticipated that there may be 7.5% more obese adults by 2030, with the largest increases in the age group 35-44.¹⁷
- The prevalence of diabetes in the ABMU LSB population is projected as rising to 11.3% of the population in 2030.¹⁸

Wellness in the workforce

- In Swansea by 2030 we will see the projected numbers of younger adults reporting Limiting Long Term Illness increase by 3.4%. However, it should be noted that there is anticipated to be an increase of 35.6% of reported LLTI in the 35-44 population.¹⁹
- There will be a projected increase of 5.7% of adults in Swansea aged 19-64 with any mental health problem by 2030.²⁰

Carers

- The percentage of girls in Swansea aged 15-17 predicted to give birth is projected to increase by 15.5% by 2030.²¹
- In Swansea, the number of carers aged 25-64 is expected to rise by 9.1% by 2030, while the younger age group of 16-24 is predicted to fall by -1.3%.²²
- As people age, they may find themselves caring for their partner or other family member. In Swansea, the number of elderly carers is expected to rise by 34.2% by 2030.²³

Ageing Population

- By 2030, there are expected to be 34.1% more people aged over 65 in Swansea than there were in 2011.²⁴
- The population aged 85+ is projected to grow by 77.9% in Swansea by 2030. Social services for older people are increasingly focussed on the most elderly and increases are likely to place strain on demand for services.²⁵
- Projections indicate a 71% increase in older people requiring residential care by 2025 across Wales alongside an increase of 61% of those needed some form of community based care.²⁶
- A 45.5% increase in the number of older people in Swansea unable to carry out at least one mobility activity on their own is projected by 2030. Similar increases are anticipated around continence, the ability to perform household tasks and manage self care. The largest increases are amongst those aged 80+.²⁷
- We can expect to see the number of older people living alone increase by

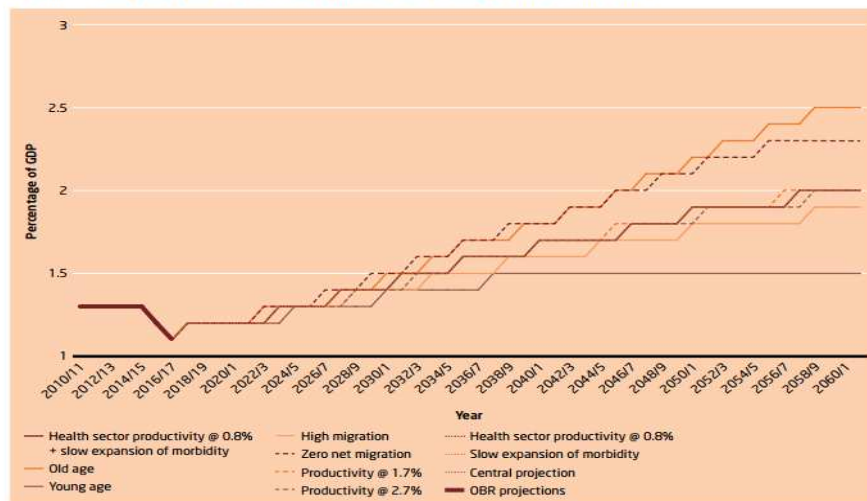
33.4% by 2030.²⁸

- An increase of 49.5% in people who will be receiving a service from social services to keep them in the community by 2030 is forecast.²⁹
- The number of people receiving a residential / nursing service from social services is estimated to increase by 56.5% by 2030.³⁰

Care Spending

Long-term projections for long-term care spending in the UK, 2016/17 to 2061/2³¹

Figure 26 Long-term projections for long-term care spending, 2016/17 to 2061/2



Notes: figures for 2011/12 to 2015/16 are estimates; future projections start from 2016/17
Source: Office for Budget Responsibility (2012)

Key questions for future service delivery

1. How can services shift from a deficit model which focuses on what service users can't do to one which capitalises on what they can?
2. How can we create new capacity to meet demand by employing existing resources in new ways across services?
3. How will services react to changes in the financial robustness of partners or a market place that operates at sub optimum standards or where services are not available at acceptable standards for an affordable price?
4. How can a whole Council approach be adopted to communicate key messages promoting well-being through prevention and early intervention?
5. What potential exists for new funding models to be developed for example continental style co-funding?
6. How can services be fundamentally reshaped to secure the best possible outcomes with limited resources?
7. What role can preventative approaches such as increasing physical activity play?
8. How can services develop a pluralist approach working in partnership, commissioning and co-operating with private, mutual and third sector providers?
9. How can economic prosperity be delivered with a decrease in the working population? How can services adapt and flex to utilise people with limited capacities?
10. How will services adapt to meet the workforce's increased responsibility caring for the old and young?

Poverty and Deprivation

Trends

Welfare Reform

- Far reaching welfare reform will have significant impact on Swansea's individuals and communities. The impact in 2015/16 is expected to result in absolute benefit loss of £73 million in Swansea.³²
- Evidence suggests that each £1 of income lost could impact the wider economy due to a multiplier effect estimated at somewhere in the range of £1– £1.50³³
- Wales Public Services 2025 estimates the impact on Wales of Welfare Reform may remove £1 billion from the Welsh economy³⁴
- Cuts to benefits and more stringent entitlement rules may push people out of unemployment and into crime activities. There is also some evidence that the timing and frequency of welfare payments can impact on crime levels.³⁵
- A major study of 'universal credit relevant' clients undertaken by Citizens Advice in 2013 found two-thirds of participants (66 per cent) were unable to get on-line to manage a claim at the initial assessment stage.³⁶ Demand to increase skills will increase as services increasingly become 'digital by default'.

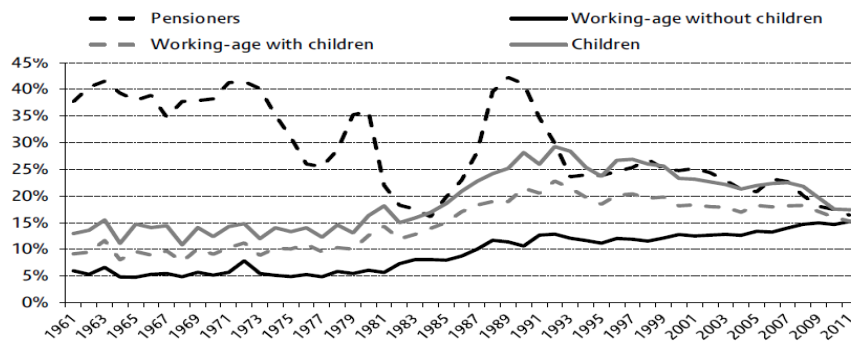
Household Consumption Trends

- The 2010-2020 Food Strategy for Wales acknowledges the World Bank's forecast that the world's increasing population will lead to an increase in demand on food supply resulting in higher input and output commodity prices.³⁷
- Even a relatively benign unwinding of today's emergency interest rate position allied with anticipated growth in household incomes has the potential to roughly double the number of households facing some form of repayment problem by 2018.³⁸
- The Centre for Economics and Business Research forecast annual food bill increases of £350 between now and 2019.³⁹
- Demand for energy is predicted to be 53% higher in 2030 than in 2004.⁴⁰
- Demand for gas is set to increase by 60% globally.⁴¹

Poverty

- The Child Poverty Act 2010, passed with cross-party support, makes the target to eradicate child poverty by 2020 a legal requirement. General consensus projects this target is highly unlikely to be met.⁴²
- Pensioner poverty is reducing with the growing issue of working-age poverty and a resurgence in child poverty being the key concern in the coming years.⁴³ Joseph Rowntree Foundation research suggests that over 217,000 people lacked but wanted work in 2012 and suggest that jobs will be scarce in Wales for a long time.⁴⁴
- Relative poverty for difference groups of the population:⁴⁵

Figure 6.1b. Relative poverty for different groups of the population (BHC)



Note: Figures are presented for GB up until 2001–02 and for the whole of the UK from 2002–03 onwards. Years refer to calendar years up to and including 1992, and financial years thereafter.

Source: Authors' calculations based on Family Expenditure Survey and Family Resources Survey, various years.

- The forecast across Europe is that poverty and deprivation will rise from 120 million to 145 million by 2020.⁴⁶

Key questions for future service delivery

1. How can services build the capacity of communities so they can engage effectively in the design and delivery of services?
2. Can services delegate enough responsibility to frontline staff and place sufficient trust in service users instincts to effectively engage in co-production?
3. How can services develop genuinely reciprocal models that combine rights with responsibilities?
4. Can services challenge the traditional roles of service recipient and provider, blurring the distinction between the two and creating an untapped resource e.g. peer to peer support services?
5. How can services shift attitudes from 'do to' to 'can do'?
6. How can services develop alternative support networks?
7. How do services engage where communities are shrinking due to social and physical isolation? Can the Council effectively use communities as a resource?
8. How does a whole Council approach break down barriers between departments? Is there potential to develop new forms of budgeting e.g. outcome based?
9. How can services respond to fluctuating demand levels without reducing the terms and conditions of direct and indirect employees impacting economic wellbeing?
10. How can services help residents improve their resilience in the face of rising prices and increased scarcity of resources?
11. How can services encourage social mobility and equitable access to services across Swansea?
12. How can services minimise their use of resources in a time of rising prices?

Housing

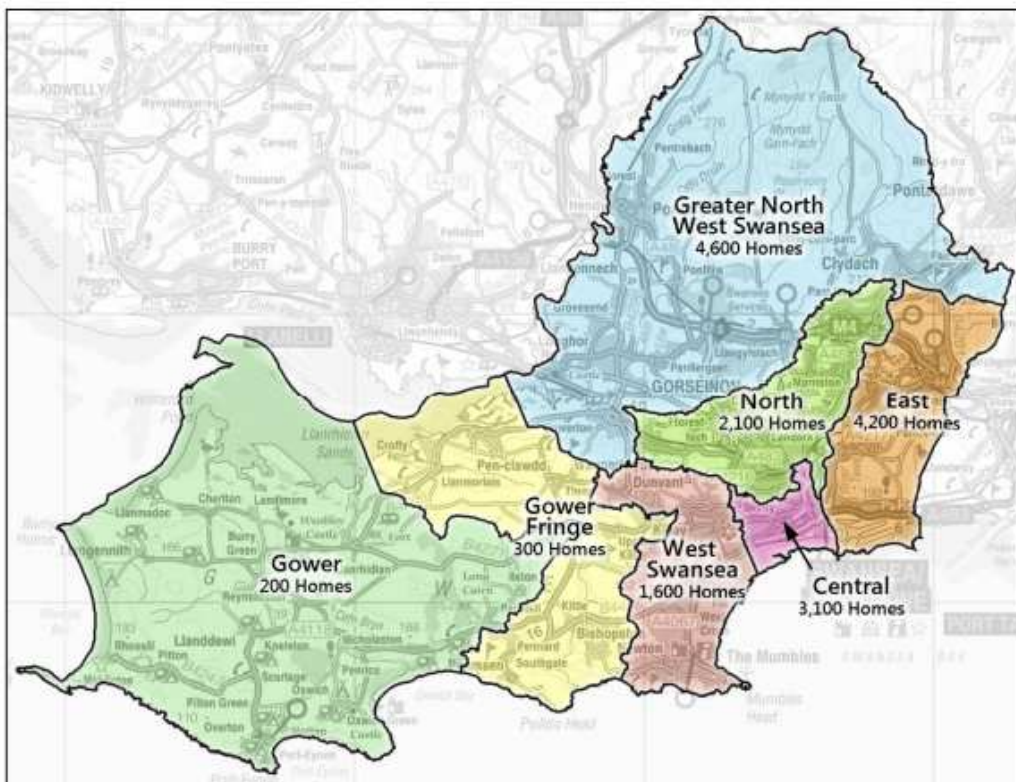
Trends

Demand

- By 2025, it is estimated that between 729-1329 new dwellings will be needed per year based on 4 scenarios (low, medium, medium-high and high).⁴⁷
- Modelling based on the medium-high scenario shows that there is a need for greater variety of size and tenure mix across Swansea.⁴⁸

Housing Size	Number of Dwellings Required			
	Market Housing	Affordable Housing		TOTAL
		Intermediate	Social	
Net Requirement 2010-2025				
1 bedroom	600	300	1,700	2,400
2 bedrooms	2,000	1,100	1,800	4,800
3 bedrooms	5,000	600	1,400	7,200
4+ bedrooms	1,400	-	100	1,800
Total	9,000	2,000	5,100	16,100

- The map below estimates the sub-areas of Swansea and their individual housing delivery requirement for the period 2011-2025.



- By 2036, the total number of households in Swansea is projected to increase by 21,900. Swansea records the second highest projected level of growth in Wales, behind Cardiff.⁴⁹
- Single person households are projected to grow by 44.5% from 34,500 in 2011 to 49,900 in 2036.⁵⁰
- Housing construction is not keeping pace with demand, which is expected to contribute to house price inflation in the long-term.⁵¹

Standards

- By 2020, The Welsh Housing Quality Standard requires all social landlords to improve their housing stock to an acceptable level.⁵²
- Across Wales 140,000 properties (12%) are at risk of flooding which is likely to increase with rising sea levels by 2040.⁵³

Suitability

- In Swansea, the number of people aged 65+ is projected to increase by 19,000 by 2036.⁵⁴
- Frailty in the over 65s is predicted to increase by 11.5% from 2012-2018.⁵⁵
- 18,850 new overseas migrants are forecasted in Swansea by 2036.⁵⁶
- Proposed changes in homelessness legislation are may result in an increase in applications by up to 10%.⁵⁷

Key questions for future service delivery

1. Given our current models for service delivery, will our housing legacy be fit for future generations in 2040?
2. Will the housing demand be met and what strains will this place on budgets and available land?
3. Will there be sufficient community, leisure and education facilities to serve new housing development?
4. How might the local authority play a role in ensuring the appropriate supply of good quality affordable homes in 2040?
5. Given the likely demographic trends, what additional challenges will be presented by the housing needs of an increased number of vulnerable people (i.e. homeless, refugees, asylum seekers, disabled, Black and minority ethnic communities (BME))?
6. What additional challenges will be presented by an already ageing housing stock by 2040 and how might CCS look to mitigate against future risks?
7. What impacts will climate change and increased extreme weather events have on our housing stock and how will this impact on maintenance and repair budgets?
8. Given the trend for an ageing population, what adaptations and assistive technology will be needed by 2040 and what level investment will this require?
9. How might changes to welfare reform and benefits have an impact on housing needs in the long-term?
10. Will we have more or less homelessness in 2040 and what challenges will the expected rise in applications present for CCS' services?

Education and Skills

Trends

Demand on schools

- In Swansea, by 2030, there are expected to be 19.3% more people aged under 18 than there were in 2011. This should be compared to projections for Wales, where the child population is expected to grow by just 4.6% in the same period.⁵⁸
- An increase in school age children across Wales by 2025 indicates although there are often surplus places particularly at urban schools in the short term. In the longer term, there is likely to be a significant shortage of school places.⁵⁹
- The percentage of age 11 pupils in Year 6 Welsh Medium Education is projected to rise from 10.7% in 2013 to 16.4% in 2019.⁶⁰
- There will be an increase in numbers of children and young people with a learning disability of 19.3% by 2030.⁶¹
- There is expected to be a 28.6% increase in the numbers of children and young people displaying challenging behaviour by 2030.⁶²

Future Skills Base

- The qualification profile of employed people in Wales has improved and is projected to continue to improve by 2020⁶³ Skill supply is rising with 40% of employed people at Level 4 or above by 2020.⁶⁴

Skill Requirements and Curriculum in Swansea

- The occupations projected to increase the most in terms of employment by 2030 are caring personal service occupations, teaching and educational professionals and corporate managers and directors, business and associate public service administrators and administrative occupations. Occupations in greatest decline include skilled metal, electrical and electronic trades, process plant and machine operatives, protective service occupations and textiles and printing trades.⁶⁵
- There is very little provision for agricultural and animal care skill development, this fails to address projected growth outside of Swansea, emerging food security issues and the WG prioritisation of the Food and Farming sector.⁶⁶
- The sector Skills Council has identified that there is a future demand for Welsh language written and oral skills particularly in customer facing roles.⁶⁷
- Administrative, management and directorial occupations are forecast to increase by 2030 justifying investment in these skills however administration accounting and finance is not currently offered widely at 16-18.⁶⁸
- The high incidence of SMEs and self employed individuals in the County suggest basic business and management skills training which support entrepreneurship should be encouraged.⁶⁹
- The 2014 Curriculum and Labour Market Review identifies 'notable gender imbalance in sectors where growth is projected in 2030 including construction, Health and Social Care and Business Support Services.⁷⁰

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- The 2014 Curriculum and Labour Market Review identifies a need to develop soft skills across the economy.⁷²
- The low-carbon transition will require a combination of skills across different sectors and it is vital that these are available – for example, with 80% of employees in the energy sector due to retire within the next 10-15 years a pipeline of sufficiently skilled workers will be necessary.⁷³

Key questions for future service delivery

1. How will young people be learning in 2040? Will this be influenced by advances in technology? Will there be remote learning?
2. What will the legacy of early intervention and preventative programmes implemented now e.g. Flying Start) be in 2050?
3. What role will schools play in our communities? Will they take on a greater role beyond education?
4. Will bilingual and Welsh medium schools still exist?
5. Will education still be delivered by local authorities?
6. How can services work more effectively with partners in the FE and HE sectors to harness innovation?
7. Could the services use the knowledge and need for experience in FE and HE to deliver projects together?
8. Will current provision enable services to best adapt to and encourage a low carbon economy?
9. How can services encourage Green Growth and the development of Green Skills?
10. Could apprentices, interns, academics and students be used more effectively as a resource?

Infrastructure and Energy

Trends

Energy

- Fuel prices are predicted to continue to rise by 2040.⁷⁴
- GDP, growth and productivity will decline if new and cost-effective non-oil energy sources are not found fast to protect future growth and prosperity.⁷⁵
- £330bn of investment is needed in UK energy infrastructure by 2030.⁷⁶

Transport

- Wales is heavily reliant on car travel with 3 in 4 people using the car to get to work.⁷⁷
- Road traffic in Wales is predicted to be 39% higher in 2040 than in the level in 2010.⁷⁸
- 95% of transport in UK is currently reliant on oil⁷⁹, petrol and diesel supplies will be more unreliable, however there is predicted a shift from oil based fuels to electric and biofuels.
- In Swansea there is currently a gradual decrease in road traffic, or at least a neutral trend, whereas cycling is increasing by approximately 10 – 20% per annum depending on the route.⁸⁰
- Low carbon (probably electric or hydrogen) will start to appear on the market and will be central to cutting emissions.⁸¹

Infrastructure

- There is an increased risk on infrastructure assets from severe weather events, with an increase of assets in areas with a high likelihood of flooding by 50% by 2050s (UK).⁸²

Key questions for future service delivery

1. How can services minimise their use of resources in a time of rising price?
2. How will we be producing/consuming energy in the future in Swansea?
3. What is the services' role in building resilience to energy prices?
4. Will people be able to heat their homes adequately if heating bills and water bills continue to rise? How will this impact demand on Council services in the future?
5. How will high road fuel costs affect Council services and access to services? Will we be using alternative forms of transport such as public transport, walking or cycling?
6. Will people still travel in the way that they do now and where will they be travelling to? Will some groups still be able to get to where they need to? How will our transport networks need to adapt to these changes?
7. How will an aging and an increase in the younger population influence travel pattern trends?

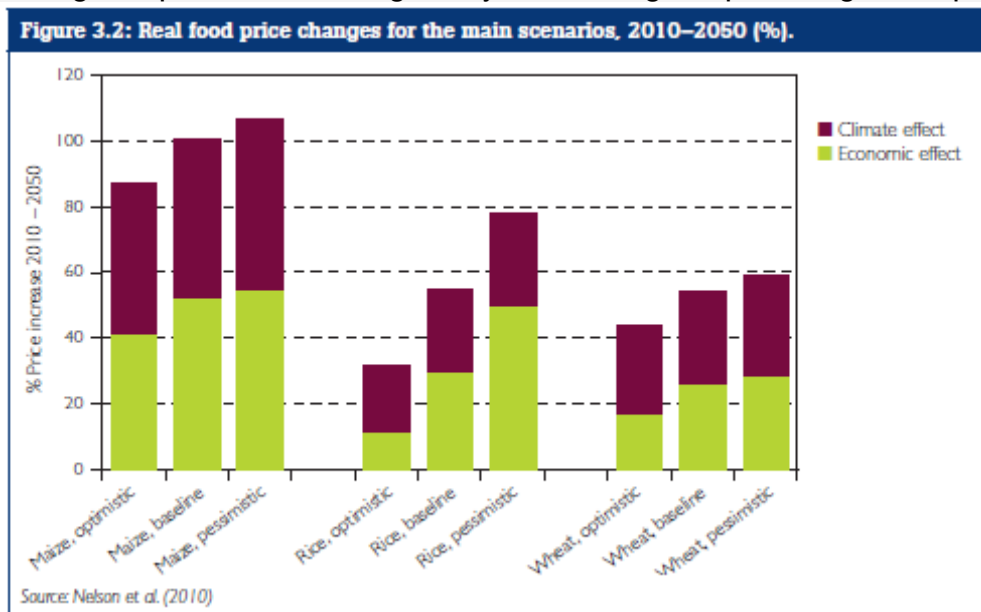
8. Will we still be using petrol and diesel in our cars or something else? Will we be using road charging points for electric vehicles?
9. Will people still need to commute to a place of work? Will more people be working from home? Will that workplace still be in the local area?
10. Could people in Swansea share transport costs? Share lifts to places of work? Set up community transport options?
11. What impact will increasing numbers of cyclists have on their vulnerability on the road?
12. How will we manage the impact on infrastructure due to increasing severe weather events with decreasing financial resources?
13. Will some roads be given up and not maintained? How could the roads be maintained?

Natural Resources and Environment

Trends

Food and Agriculture

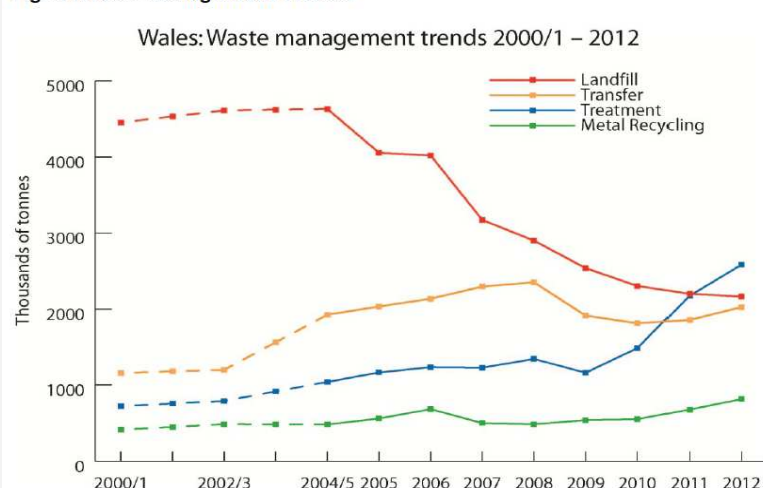
- There is an increasing conflict of interest for our environment – agriculture, industry, communities, housing, energy, construction, tourism.⁸³
- Britain is likely to become less self-sufficient in food production in the future, current production currently stands at 60% of the food it consumes but has been falling year on year.⁸⁴
- It is estimated that by 2050 developing countries' net imports of cereals will more than double from 135 million metric tonnes in 2008/09 to 300 million in 2050⁸⁵, increasing competition for food globally and driving the price of grains up.⁸⁶



Waste and Water

- Welsh Government have set a target of zero waste for Wales by 2050 (65% reduction on *total waste*), and have an intermediary target of 70% reduction in municipal waste by 2025.⁸⁷

Fig 1.1 Waste Management Trends



- There is only 10 years of landfill capacity left in south west Wales.⁸⁸
- Water demand is forecast to reduce from now to 2040 and Swansea's Water Resource Zone, Tywi Gower is predicted to be in surplus in 2040.⁸⁹

Pollution

- Health impacts from air pollution will increase worldwide, with the number of premature deaths due to urban ozone exposure set to increase by 300% in Europe by 2030.⁹⁰
- Central UK Government has stated that almost every new car and van needs to be zero-emission at the tailpipe by 2040.⁹¹

Nature

- The abundance of species is predicted to decline by 9-17% by 2050 with a loss of over a million species globally.⁹²
- The value of pollination as a contribution to the UK crop market in 2007 was £430 million and the cost of hand pollination, were we to lose this valuable service, has been estimated at £1.8 billion per year in the UK. Pollinators are declining populations e.g. honeybees showed a 23% decline in Wales between 1985 and 2005.⁹³

Key questions for future service delivery

1. How will residents treat their environment in 2040? Will there be more/less disregard for the environment?
2. How will the Council manage the increasing competition for natural resources locally?
3. How will people in our communities adapt to food security issues?
4. What role can the Council play in support community resilience to increasing food costs?
5. What impact will rising food costs have on service provision?
6. What impact will increasing traffic have on air quality?
7. How could services manage their transport requirements to reduce the need to travel?
8. What role could eco-system services play in building resilience to risks for human health and economic development?
9. What role do services have in building the capacity of eco-system services to take on this function?

Climate Change Adaptation

Trends

Changes in Temperature⁹⁴:

Changes in daily mean temperatures in Wales by the 2050's:

Summer – between 1.2°C and 4.1°C

Winter - between 1.1°C and 3.1°C

Impacts:

- Hot weather related deaths and illnesses
- Over heating of buildings
- Environmental impacts – soil, biodiversity, ecosystems and landscapes
- Introduction of non-native pests and diseases

Changes in precipitation⁹⁵:

Changes in mean precipitation in Wales by the 2050's suggest that there will not be a significant increase in overall annual precipitation however there will be a change in the distribution across the seasons:

Winter precipitation - 2% to 30% increase

Summer precipitation - 36% decrease to 6% increase

Impacts:

- Low river flows and water availability
- Flooding and sea surge
- Agricultural production (crop and animal)
- Soil conditions
- Biodiversity and ecosystems and landscapes
- Economic services i.e. tourism

Changes in weather events⁹⁶:

There is an increased likelihood of extreme weather events for example:

- An increased risk of extreme wet seasons and severe flooding - increased 2 fold
- An increased risk of extreme hot summers – increased 2 fold.
- An increased risk of exceptionally warm months 60 times more likely than 50 years ago
- A reduced risk of extreme cold weather in winter – half as likely
- An increase in sea temperatures by the 2050s – UKCP09 states that there will be an increase in temperature in the Irish Sea between 0.6°C and 2.3°C in the winter and 0.3°C and 2.9°C in the summer under the Medium emissions scenario.
- Increasing sea level rise – by a rate of 1 millimetre, this is a long established pattern±.
- Increase in the frequency of violent storms and gales

Impacts:

- Flooding and sea surges - Coastal erosion, flooding related deaths and illnesses.
- Increase in droughts - Low river flows and water availability, agricultural production (crop and animal), Soil conditions, Biodiversity and ecosystems and landscapes, Economic services i.e. tourism.
- Increase in exceptionally warm months - Agricultural production (crop and animal), Soil conditions, Biodiversity and ecosystems and landscapes, introduction of non-native pests and diseases
- Increasing sea temperatures – changes / damage to aquaculture production (flora and fauna) biodiversity and ecosystems, economic services i.e. tourism.
- Increasing sea levels – Sea surges, coastal erosion, coastal flooding related deaths and incidents.
- Increase in the frequency of violent storms and gales - Coastal erosion, damage to ecosystems and landscapes, death or incidents from falling trees and debris.

Key questions for future service delivery

1. What impacts will an increase in deaths from hot weather or extreme incidents like storms and gales have on services?
2. If the over heating of buildings becomes a major problem how might we develop or adapt our approach now?
3. How might disruption from significant flooding events impact on services such as 'just in time' food delivery processes? How might the Council build resilience to extreme weather events onto sub contracted services like Meals on Wheels to ensure continued service delivery?
4. How might hotter summer's impact on our local tourism and agriculture industries?
5. How might increased incidents of drought periods impact on how services might use water in the future?
6. Will climate change restrict the use of water in businesses/industry and how might this impact the development of tourism and the knowledge economy?
7. How might the Council redistribute staff resources to provide continual services to the community (especially the vulnerable) during a prolonged severe incident for example keeping schools open?
8. How can green infrastructure be used to make communities more resilient to climate change and/or extreme weather events?

Economy & Employment

Trends

Overall trends

- With social care and waste spending absorbing a rising proportion of the resources available to councils across the UK, funding for other council spending drops by 66% in cash by the end of the decade, from £24.5 billion in 2010/11 to £8.4 billion in 2019/20. This is the equivalent of an 80 per cent real terms cut.⁹⁷
- Across the UK it is expected that almost that there will be 2.61 people working for every one pensionable resident by 2035, down from 3.14 at the moment.⁹⁸
- Between 2024 and 2046, state pension age will increase in stages from 65 to 68 years for both sexes.⁹⁹
- Across the UK, state pension costs are predicted to increase from 5.5 per cent of GDP in 2018-19 to 7.9 per cent of GDP in 2063-64 as the population ages.¹⁰⁰
- National projections suggest that real incomes will double between 2010 and 2050 with highly educated/skilled areas set to prosper but likely to be a driver for increasing inequality.¹⁰¹
- In 2011, figures show increases in economic activity over the last ten years, up from 58.6% to 63.0% in total, with increases in the proportion of people aged 16-74 working part-time, self-employed and students. In Swansea, total employment is projected to reach a low of 115,200 in 2014, before consistently increasing through to a period high of 125,800 in 2030. The projected increase in total employment from 2013 to 2030 is 10,500.¹⁰²
- Total Gross Value Added (GVA) in the City & County of Swansea is projected to increase consistently from 2013-2030; the total increase over the 17 year period is expected to be £1261.1million.¹⁰³

Economy

- The sectors in the City & County of Swansea projected to experience the largest increase in GVA between 2013 and 2030 are:
 - Real Estate (+£221.4 million)
 - Health (+£150.2 million)
 - Financial and Insurance (£138.7 million)
 - Construction (+£106.4 million)
 - Business Support Services (+£91 million)
 - Retail Trade (+£67.2 million)
 - IT Services (+£54.2 million)
 - Education (+£49.6 million)¹⁰⁴

Employment

- The principal sectors in terms of projected employment figures in 2030 are:
 - Health (15,400 people)
 - Retail Trade (11,800)

- Education (11,800)
- Business Support Services (11,600)
- Public Administration and Defence (9,600)
- Construction (8,400) Food & Beverage Services (8,400)
- Financial and Insurance (7,300)
- Residential and Social (7,300)¹⁰⁵

Growth Sectors

- The sectors in the City & County of Swansea projected to see the largest increase in employment between 2013 and 2030 are:
 - Health (+3,300 people)
 - Financial & Insurance (+2,200)
 - Business Support Services (+2,100)
 - Food & Beverage Services (+1,700)
 - Construction (+1,300)¹⁰⁶

Decreasing sectors

- The sectors in the City & County of Swansea projected to experience the largest decrease in employment between 2013 and 2030 are:
 - Public Administration and Defence (-1,700 people)
 - Metal and Metal Products (-400)
 - Education (-300)
 - Food, Drink and Tobacco (-200)¹⁰⁷

Key questions for service delivery

1. How will CCS effectively manage the fiscal risks associated with the public sector trends beyond 2020?
2. What is the timeline for CCS in re-shaping services given the projected shifts in demand of social services and waste?
3. Will we continue to see an erosion of council authority, capacity and service delivery? Will markets prove capable of filling the gaps?
4. What leadership role might CCS play in ensuring that best value is delivered within Swansea from emerging and growing business sectors?
5. What role might CCS play in ensuring that residents are educated/skilled appropriately to take advantage of future job opportunities?
6. How can CCS prevent the trend for increasing levels of economic inequality driven by the need for highly skilled and/or highly educated professionals?
7. What infrastructure will we need to invest in to help exploit opportunities that may arise by 2040?
8. How might the pattern of employment differ (working from home, flexible working, number of hours) and what impact will this have on public service delivery?
9. How can CCS play a leadership role in promoting municipal entrepreneurialism and income generation?
10. Will more fiscal powers (such as tax raising) by Welsh Government ensure sustainable economic growth?

Community Safety

Trends

Crime

- Analysts suggest that greater incidents of internet crime, identity theft and knowledge and information crime will become more prevalent given the reliance on the internet.¹⁰⁸
- Recorded crime has steadily been falling although perceptions of anti-social behaviour (noisy neighbours, litter, vandalism, graffiti, drug dealing etc.) have been on the rise.¹⁰⁹
- Prison population in England and Wales is forecasted to increase by 2019.¹¹⁰
- Trends, means and patterns of radicalisation are evolving and have broadened across a range of ideologies.¹¹¹

Safety

- Road Casualties are reducing.¹¹²
- Fire incidents and deaths are continuing to decrease.¹¹³
- Alcohol and drug use levels are not improving.¹¹⁴

Key questions for future service delivery

1. What new challenges for community safety might we be facing by 2040? Are there opportunities between now and mid-century to prevent them?
2. How might we prepare for the effects of energy food and water security? Will these issues cause problems? Theft of fuel and food?
3. How will we be dealing with criminals and youth offending? Will it be different from now?
4. What will the community look like in 2040? Will there be increased cohesion or isolation?
5. Will current programmes succeed and continue to reduce crime rates?
6. How will the community be policed in 2040, will there be a rise/fall in the number of policeman and or community police?
7. Will we still be dealing with current levels of domestic abuse?
8. Will e-crime have an effect on our community?
9. Will there be food shortages?

Technology

Trends

Innovations

- **Materials:** New materials and nanotechnologies will help support a range of technologies such as IT processing and 3D printing.¹¹⁵
- **Tools:** will increase our understanding of human behaviour and society providing a greater source of evidence and analysis for underpinning policy and other decision making.¹¹⁶
- **Sensors:** Light, motion and magnetism are becoming increasingly small and increasingly connected, with cheap sensors able to
 - monitor the quality of drinking water
 - detect structural damage in buildings and vehicles
 - and sense and measure pollution in the environment.¹¹⁷

Internet & Communication Technology

- Internet connections will move beyond traditional devices. The 'Internet of Things' will account for an increasingly huge number of connections: 1.9 billion devices in 2013, and 9 billion by 2018. That year, it will be roughly equal to the number of connected smartphones, smart TVs, tablets, wearable computers, and PCs combined.¹¹⁸
- The demand by customers and businesses for a convergence of capabilities (e.g. voice, data, video, etc.) delivered over the Internet is increasing, as business practices and lifestyles change and consumer technology evolves.
- By 2020, it is predicted that
 - all citizens will have access to 30Mbit/s (superfast broadband)
 - 50% of all citizens, businesses and public sector organisations will have access to at least 100Mbit/s.¹¹⁹
 - 67% of the UK population are engaged with social networks with this set to rise by more than three quarters by 2020.¹²⁰

Smart Infrastructure

- The electricity distribution network will need new instrumentation to support micro-generation
- There will be an increased need for electric vehicle recharging.¹²¹
- All households should expect to have a smart meter installed by 2019.¹²²

Health

- e-Health technological advances are expected to assist in health monitoring, diagnosis and treatment. These are expected to help professionals and local authorities to deliver better care for less money. Advances are predicted in:
 - health information networks,
 - electronic health records
 - tele-medicine services

- personal wearable and portable mobile devices
- health portals.¹²³

Energy Security

- Intermittent energy supply is seen as a major future challenge, but also a possible source (or accelerator) of innovation.
- Advances in renewable technologies and storage are expected to increase the localisation of energy in the future.¹²⁴
- New energy storage systems will play a role in providing back-up, particularly those that can decouple power output and storage capacity.¹²⁵

Key questions for future service delivery

1. What technology will be available in 2040 and what opportunities does this present for each service - for example, will social services be using the latest e-Health technology and how might this impact on the service?
2. In which service areas might technology start to replace some of the functions currently being carried out by employees?
3. What impact will technological advances have on our schools and the way children learn?
4. How will innovations like sensors, remote monitoring, smart-meters, electric vehicles, video conferencing, cloud computing, nanotechnology and 3D printing transform the way each service operates?
5. How will flexible working arrangements such as remote working and working from home make a difference to service delivery across the council?
6. Given the increased use of smart phones and social media, how will each service be interacting with residents and what impact will this have on citizen expectations and security?
7. How might mathematics, modelling, simulation help provide evidence and present solutions for underpinning policy and decisions?
8. How can CCS ensure that there is equal and ubiquitous access to the latest technology across Swansea including more deprived and rural areas?
9. What technological advances should CCS be investing in to help facilitate greater collaboration on projects at a local, national and global level?
10. What role might CCS play in ensuring that there is a stable, clean energy supply that utilises the latest technologies in energy generation and storage?

Culture, Heritage and Language

Trends

The Welsh Language

- The 2011 Census states that there were 26,332 people aged over 3 able to speak Welsh in Swansea, 11.4% of the County's population. This compares with a Wales average of 19%.¹²⁶
- 35% of Welsh speakers were aged between 5 and 18 suggesting that in the future the percentage of adult Welsh speakers may rise.¹²⁷
- There has been a 9% (2,500) decline in the number of Welsh Speakers over the last decade in Swansea.¹²⁸
- Language Sensitive Areas where the proportion of Welsh speakers is higher than the national average (19%) have also seen a reduction in the percentage of Welsh Speakers. In Mawr, the area of Swansea with the highest concentration, the percentage fell from 47.6% in 2001 to 38.3% in 2011.¹²⁹

Welsh Language Projections in (Wales):¹³⁰

Total aged 3 and over	2001	2011	2021	2031
% able to speak Welsh	20.8	20.0	20.0	20.3
Number able to speak Welsh	582,000	583,000	617,000	654,000

Society

- Volunteering is increased generally despite a small decrease in 2013, and there is a trend away from single sources of payment such as government.¹³¹
- In March 2014 a survey of Welsh households estimated that 37 percent of adults in Wales volunteer.¹³²
- Third sector organisations report a rise in demand for counselling, housing, financial and welfare advice.¹³³
- Where household size decreases there is likely to be a thinning effect on the population resulting in a less dense community.¹³⁴

Heritage

- In 2013, 8.5% of Listed Buildings in the County are on the 'Buildings At Risk Register' as they are considered to be at risk or vulnerable.¹³⁵
- There are over 4000 sites of historical and archaeological importance in the City and County of Swansea of these, 122 are protected Scheduled Ancient Monuments, twenty of which are in the ownership of the Council.¹³⁶

Key questions for future service delivery

1. How can services engender a culture of participation where residents believe they can make a difference?
2. How can a whole Council approach be adopted to communicate key messages promoting well-being through prevention and early intervention?
3. How can services reflect Swansea's culture and heritage in their physical presences and help differentiate Swansea as a distinctive place?
4. How will services cost effectively integrate the Welsh language into service delivery?
5. What will Swansea's identity be in 2040? As the make up of communities change, how will this impact social cohesion?
6. How can services encourage developing identities to remain positive and inclusive?
7. How can services recognise and support the City's cultural strengths and areas of expertise e.g. Swansea has a national reputation for stained glass, but little is used in public art, public buildings etc?
8. How might services acknowledge and build on grassroots cultural movements that foster distinctiveness?
9. Can elements of non statutory services fundamental to wellbeing be integrated into the delivery of core services?
10. How can we mitigate the impact of withdrawing from service delivery in important but non statutory areas?
11. How can services use the capabilities and capacities of citizens and partners to develop innovative and sustainable structures?
12. How might services better integrate and promote the Welsh language?
13. How can services best protect assets and safeguard resources for the long term?

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