GCVSDPA

Futures

An introduction to
Futures work

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Futures work

January 2009

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Introduction

Glasgow and the Clyde Valley Strategic Development Planning Authority **Futures Group**

The **Glasgow and the Clyde Valley Strategic Development Planning Authority** (GCVSDPA) is a local government joint committee comprising eight local authorities in the Glasgow and the Clyde Valley area working together on setting out the long-term (20 years plus) spatial development strategy for the area. This plan is to be known as the **Strategic Development Plan** (SDP) and will replace the current **Glasgow and the Clyde Valley Joint Structure Plan**. The eight constituent local authorities are **East Dunbartonshire**, **East Renfrewshire**, **Glasgow City**, **Inverclyde**, **North Lanarkshire**, **Renfrewshire**, **South Lanarkshire** and **West Dunbartonshire**.

More information on the work of the Joint Committee can be found at www.gcvcore.gov.uk

Glasgow and the **Clyde Valley** area profile

Population	**1.75 million**
Employment	**902,000** (418,000 in Glasgow city)
10-year growth rate	**2.0% per annum**
5-year growth rate	**3.5% per annum**
GDP	**€60 billion** (Glasgow city €27 billion)

What is Futures work?

Nobody can predict the future and this paper does not attempt to do that. A broad forecast of future social, political, economic, environmental and technological issues are unreliable beyond a few years. There are plenty of examples of forecasts which have been stunningly incorrect.

For example:[1]

"Heavier-than-air flying machines are impossible."

Lord Kelvin, British mathematician and physicist, president of the British Royal Society, 1895

"There is not the slightest indication that nuclear energy will ever be obtainable. It would mean that the atom would have to be shattered at will."

Albert Einstein, 1932

"The world potential market for copying machines is 5000 at most."

IBM, to the eventual founders of Xerox, saying the photocopier had no market large enough to justify production, 1959

These quotes demonstrate that changes occur and that they challenge the illusion of certainty that we might have. Therefore there is a real need to understand, and accept, that we operate in an ever changing environment and subsequently we must prepare ourselves accordingly in order to cope with the potential challenges ahead.

But despite the fact that we cannot fully understand the future there is a real need to make an attempt:[2]

"We can either stumble into the future and hope it turns out all right or we can try and shape it. To shape it, the first step is to work out what it might look like."

Stephen Ladyman, Deputy Chairperson Labour Party, January 2006

This quote highlights the key issue we face. If we want to be successful then we will have to have a greater understanding of what that future might look like.

1 http://listverse.com/history/top-30-failed-technology-predictions/
2 http://findarticles.com/p/articles/mi_hb5245/is_/ai_n29247903

What is Futures thinking?

There are three key points to understand when using Futures thinking.[3]

1. **the aim is to strengthen an organisations awareness about the future**
2. **this is achieved by offering alternative images of the future and choices of action based on those images**
3. **it is *not* about predicting the future**

So why carry out futures work?

There are two reasons why the Joint Committee have decided to undertake Futures work.[4]

1. Contemplation
    - it increases the range of policy options open to an organisation
    - it expands the timescales an organisation operates within
2. Action
    - it helps stimulate creativity within an organisation and its partners
    - it can be used to evaluate plans, policies, strategies and sectors
    - it helps alert decision makers to opportunities and dangers that might impact on them

3 | 4 http://www.foresight.gov.uk/Horizon%20Scanning%20Centre/GoodPractice/Toolkit.asp

Why is the GCVSDPA using Futures thinking?

The Joint Committee has decided to develop the Futures work, previously employed in support of the first Structure Plan, which sought to raise awareness and support amongst key stakeholders of the emerging spatial issues and the potential for change. This new Futures work will assist in developing an improved evidence base to underpin the new Strategic Development Plan (SDP) whilst also identifying the risks associated with such change.

The Joint Committee has a strong tradition of stakeholder engagement in this field which successfully established a common development framework round which substantive progress has been made, in particular the **Clyde Waterfront**, the **Clyde Gateway, Ravenscraig**, **Glasgow and Clyde Valley Green Network** and **Glasgow City Centre**.

The Structure Plan was also the foundation of the first Clyde Valley Community Planning Partnership's Vision Document (2003). This Vision has recently been re-launched by the aforementioned eight Authorities. A copy of the document can be found at www.gcvcore.gov.uk/downloads/MetropolitanGlasgow2008to2013.pdf

This Vision will provide the agreed direction for the Futures work.

The Joint Committee has been engaged in many months of research to provide an updated knowledge base for the SDP. This work will provide a platform for the key stakeholders from across the region to examine the key trends and produce *spatial stories* for the Glasgow and the Clyde Valley up to 2035 and beyond. These stories will then inform the SDP.

Therefore as part of the futures process, the Joint Committee feel it would be beneficial to gain a better understanding of some of the sectors that operate in the GCV area in order to develop our understanding on the key spatial issues affecting sectors of interest.

Current work is focused around identifying emerging trends through extensive information-gathering from a wide range of sources, whilst other methods such as *structured questions* and *story analysis*, are proposed with a view to engaging partners and stakeholders. These futures techniques will be used to develop common views of the future and its range of potential risks for and impacts upon the Joint Committee and its stakeholders' shared agendas. Partnership and combined capacity are fundamental to delivering the Development Strategy, as has been amply demonstrated by the Joint Committee approach during the period since 1996.

This GCVSDPA Futures project will also aim to build on the consensus created around the Glasgow Metropolitan Futures project that was undertaken by both Scottish Enterprise and Frontline Consultants in the mid-2000s and provides a platform for the Joint Committees approach.

This work is not about predicting the future, but about understanding a range of potential futures and their associated risks for the SDP.

Futures techniques

Futures work employs a number of techniques in order to help an organisation better understand potential future environments it might find it self operating within. There are two key techniques which the GCVSDPA Futures Group will employ:

1 **Horizon Scanning**

This is:[5]

- the systematic examination of potential threats, opportunities and likely future developments which are at the margins of current thinking and planning
- it allows the exploration of novel and unexpected issues, as well as persistent problems or trends
- it is intended to improve the robustness of an organisation's policies and evidence base

The aims of Horizon Scanning are:[6]

- to spot **emerging trends**
- to allow an organisation to be more aware of **what's going on**
- it gets people **thinking long-term**

The Horizon Scanning methodology includes:

- examining newspapers, journals, academic and industry papers
- speaking to practitioners and academics and getting their views on long-term trends within key sectors

Once a potentially relevant strand of information is found then we would ask the following questions:

1 **Is this a long-term trend or a short-term fad?**

2 **If it is a long-term trend, will it have an impact on the GCV area?**

3 **What would be the spatial implications of that impact?**

5 http://horizonscanning.defra.gov.uk/
6 http://hsctoolkit.tribalctad.co.uk/content/view/42/36/

Futures techniques

2 Spatial Stories

Story planning is sometimes referred to as scenario planning. It is proving to be highly successful in terms of public engagement in eliciting peoples view around **stories of the city's future**.[7]

The Stories themselves:

- are used by organisations to help them imagine and manage the future more effectively
- highlight major uncertainties facing organisations and then explores how they might play out in the future
- offer plausible alternative views of what the future might look like
- are not predictions but they provide a picture of what might happen if certain trends continue to a logical conclusion

They can be used to:[8]

- provide an opportunity to talk about the future
- offer an inclusive and consultative process to all participants
- reflect the views and challenges facing all stakeholders
- provide a neutral space (the future) for discussions
- allow detailed analysis to be woven in by blending subjective and objective viewpoints
- offer a different perspective on what's urgent and what's important

7 http://www.futuremelbourne.com.au/wiki/view/FMPlan/StoriesOfFuture
8 http://www.waverley-consultants.com/waverley.aspx?a=3&b=1

Futures process

Stages in the process

There are four key stages to be undertaken in any Futures project. These are:

1 **Initial Forecasting**

This is where you would employ past trends to project future changes. A good example of this is the use of demographic trends.

2 **Horizon scanning**

This spots and attempts to understand potential trends and drivers of change.

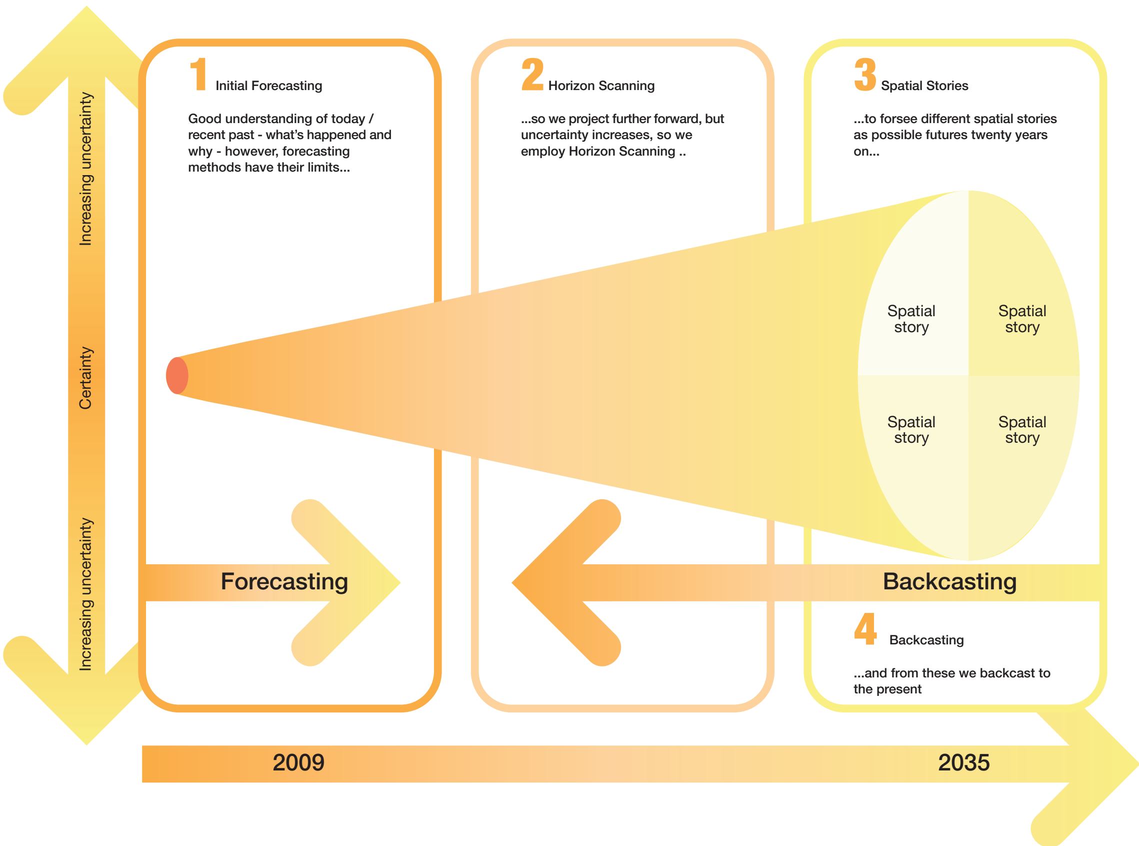
3 **Spatial stories**

The creation of spatial stories that paint a plausible picture of potential operating environments, in the future, that an organisation might find itself in.

4 **Backcasting**

This is a technique that starts from the most likely, or preferred, future spatial story and then worked back to the present, in order to devise the key steps / policy decisions required to get to that particular future.

These stages are highlighted in the diagram below:



Source: Scottish Enterprise, 2004 [9]

9 Neish, D, Scottish Enterprise, 2004

What we know and don't know about the future

There are a number of variables when an organisation attempts to understand the future. This is best illustrated by this famous quote:[10]

"There are *known knowns*. These are things we know that we know."

For example Scotland will have an ageing population profile. This profile will not even be transformed by changes in migration or birth-rates in the next ten years,

"There are *known unknowns*. That is to say, there are things we know we don't know."

These are things that we are aware of - but have limited knowledge around - and can then consider a policy response to. For example, these could be dwindling natural resources - oil, water and food.

"But, there are also *unknown unknowns*. These are things we don't know we don't know."

These are issues that are remote from conventional thinking but could have a massive impact on how we operate and our assumptions. For example the 2035 we envisage in 2009 might be completely different from what 2035 looks like in reality. This just highlights the importance of planning!

The future is a mixture of all of these…

10 **Donald Rumsfeld**, Former US Secretary of Defence

Focus of the GCVSDPA Futures Group

In 2003 the Clyde Valley Community Planning Partnership (CVCPP) launched a ten-year vision for the development of the metropolitan area. In early 2008 the CVCPP updated their Vision. This Vision document provides the agreed political context for our work. The revised Vision stated that:

"We want the Glasgow City Region to be one of the most dynamic, economically competitive and socially cohesive regions within Europe."

Therefore the **focal question** for the Futures Group will be:

"What is the spatial expression of that Vision up to 2035?"

Aims of the GCVSDPA Futures Group

The GCVSDPA Futures project has a number of aims and these will build on those set out in the **Glasgow Metro Futures Project**.[11] To provide continuity the Joint Committee will use the same aims although they will be tailored for our own particular remit.

'Hard' outputs

- develop spatial stories up to 2035
- explore the implications of those stories
- identify the key strategic details that will drive success
- inform and share knowledge with key partners

'Soft' outputs

- develop an effective engagement strategy with our key partners
- help us face critical uncertainties
- challenge established thinking and behaviour
- stimulate innovation and vision
- make a compelling case for action and change
- create an awareness that organisations operate in a changing environment

11 www.frontline-consultants.com/PDF/Scottish%20Enterprise%20Glasgow%20-%20Metropolitan%20Glasgow%20City%20Region%20Futures.pdf

Work programme

We aim to involve the GCVSDPA Futures Group from January 2009 and create and test a series of *spatial stories* by June 2009.

The key stages in the programme include:

1. **agreement around the key drivers that could influence change**
2. **the creation of the stories based on those drivers**
3. **testing the stories**
4. **identifying the spatial implications of those stories**

The Joint Committee have completed **Stages 1** and **2** respectively and is currently undertaking **Stage 3**. This involves using the **7 Questions** technique. This is used for capturing the views of decision makers and the challenges facing their organisations in the future. It has two key aims, firstly to understand stakeholders' agendas and priorities, and secondly to identify the key issues to explore.

The questions are as follows:

1. **If you could speak to someone in the year 2035 about your sector in the Glasgow and the Clyde Valley area, what would you like to ask?**
2. **What is your vision for success?**
3. **What are the dangers of not achieving your vision?**
4. **What needs to change (such as systems, relationships, decision making processes, culture) if your vision is to be realised?**
5. **Looking back 10 years, what are the successes we can build on? And the failures we can learn from?**
6. **What needs to be done now to ensure that your vision becomes a reality?**
7. **If you had absolute authority and could do anything, is there anything else you would do?**

Work programme

We have identified a number of individuals in key sectors across the GCV area. These sectors include:

- Economics
- Retail
- Media
- Health
- Telecoms
- Politics
- Energy
- Construction and design
- Entrepreneurship
- Hotel, conference and culture
- Tourism
- Transport
- Knowledge economy
- Metropolitan governance
- Housing and demographics

The Joint Committee are attempting to utilise their knowledge, insights and experience in these respective sectors which will be very helpful in informing our processes and lead to more robust thinking, and ultimately, a better informed future policy direction for the region.

Work programme

The next key stages in the process, highlighted below, are the **spatial story creation** and **testing**. This will involve initially identifying the two aspects.

1 **Pre-determined elements**

These are trends or drivers that are visible and are already impacting on the environment. For example, the impact that internet shopping has had on existing retail and travel patterns. Data has shown that between 2001 and 2008 there was an increase from 2% to 6% in online food shopping. Whilst there was an increase from 5% to 13% in non-food shopping.[12]

2 **Critical uncertainties**

Are those dynamics in the environment that are particularly unknowable, but central and essential to the future of an organisation's operating environment. For example, what impact will improved technology have on flexible working patterns and how will that impact on both travel patterns and associated local economic development.

These critical uncertainties would then provide the Joint Committee with enough scope to create a series of spatial stories for the region. The spatial stories would then be developed so that they were plausible views of the future that are relevant to all the stakeholders and their particular sectors.

The next critical stage would be the **So what** workshops. At this juncture the Joint Committee would use the agreed spatial stories to provide a plausible backdrop and allow us to focus on the spatial, and policy, implications for the GCV area up to 2035.

The analysis and summary stage would pull together all the previous analysis and working documents and present it in a final report format.

12 *Experian Retail Expenditure (Fine) Report*, 2008

Key drivers of change

In this section the Joint Committee will examine the key trends that are driving change and how these could impact on the GCV area.

All organisations that operate in complex and dynamic environments have to contend with a range of influences and it is important that they consider the environment of the future, and not just the past. There are three key variables that influence understanding. These are:[13]

1. **Key operating environment influences**

   It is important to understand the key influences that could impact on organisation's long-term robustness. The main issue is to understand the dynamics at play and the sense that what operates well presently may not necessarily do so in the future. For example, a range of influences could be the issue of an ageing population, the rapid development of technology and finally the long-term economic uncertainty. These three influences alone - these are not exhaustive - will have a huge impact on the long-term direction and success of the area.

2. **Definition of key drivers**

   These are the drivers that are behind the visible and/or anticipated trends and developments in the GCV area. One reason for examining them is that they may change in ways whereby trends that appear to be well-entrenched turn out to be slow, in-reverse, or move in new directions. An example of a driver of change is globalisation which has been driven by improved global communications, new global business networks and the homogenisation of consumer demands.

3. **Differential impact**

   This asks to what extent the aforementioned variables (1 and 2) will affect different organisation in different ways. This allows organisations to understand their strengths and weaknesses in light of the key influences. For example, companies may operate in another way due to differences in technology available to them, the labour supply in the area and the differing demands of customers.

The Futures project will initially focus on variable number 2. However, understanding variables 1 and 3 will be essential at different stages in the process.

13 *Exploring Corporate Strategy,* Johnson, G and Scholes, K, Prentice Hall, 1993

Key drivers of change

The following sections highlight some of the key drivers that could impact on the GCV area. They have been categorised under the significant themes applicable to the GCV area.

Economic drivers of change

The GCV area operates within an interconnected global market, therefore the issues the area could face will be how it will compete, with other city regions, and what sectors will be the ones that could drive success for it. There is a tacit understanding that global growth will continue and this will be driven by the developed economies but also increasingly by the emerging economies - Brazil, Russia, India and China - as their demand for goods and services intensifies.

The key issue for the GCV area is how will it take advantage of this changing economic landscape. Most commentators agree that the future for Scotland will be around the concept of 'comparative advantage'. This essentially asks the question, what are we doing well at present and how we can capitalise on those strengths. For example, the region has a strong financial sector as well as a globally recognised higher education sector. These are well developed foundations with which to build on.

Clearly the credit crunch will impact on the region's economic health. The current Government spending levels and rising national debt levels will have implications for future Government spending commitments. However, it is important to stress the long-term outlook and that whilst the downturn will lead to a contraction, the long-term prospects are still healthy.

Economic

Key drivers

1. Continuing global growth
2. Emerging economies
3. Comparative advantage
4. Impact of the credit crunch

Policy implications

1. How will the GCV area re-position itself in the global market?
2. What are we good at and how do we capitalise on these new markets?
   - Financial services
   - A strong education sector
3. Future key sectors:
   - Innovative Manufacturing
   - Business and Financial services
   - Personal services, such as health
   - Information and Communications Technology (ICT)
   - Biotech and Life Scieces
   - Tourism
4. Impact on the ‘real economy’
   - Long-term implications of increased levels of Government spending
   - Short to long-term impact on key sectors
     - Housing
     - Retail
     - Financial services

Environmental drivers of change

The environment, and climate change in particular, will remain one of the biggest drivers of change across the region. The target of cutting CO2 (e) emissions by 80% by 2050 will have a huge impact on how our region operates. For example, this will have implications for resource usage, consumption patterns and organisational practice to name but a few. In recent times the Joint Committee led a climate change project in association with the Tyndall Centre. The table below shows the GHGs, at 2004 levels, for four sectors: energy, industrial processes, waste and agriculture.

Glasgow and the Clyde Valley metropolitan area Total emissions at 2004 (tonnes)

		CO_2	CH_4	N_2O	HFC	PFC	SF_6	Total CO_2 equivalent	
Energy Sector	total	12,827,000	40,490	280				**13,841,000**	89%
Domestic		4,668,000	1,530	110				**4,737,000**	31%
Industry		2,245,000	250	80				**2,275,000**	15%
Services		1,330,000	180	40				**1,347,000**	9%
Energy Transformation		90,000	20	10				**93,000**	0.6%
Energy Industry Own Use		396,000	40	10				**400,000**	3%
Fugitive Emissions		404,000	38,400	0				**1,287,000**	8%
Other		297,000	10	0				**299,000**	2%
Transport		3,395,000	70	30				**3,406,000**	21%
Industrial Sector	total	0	0	0	242,860	2,650	0	**322,000**	2%
Waste	total	12,530	24,100	130				**750,000**	5%
Agriculture	total	14,240	1,360					**606,000**	4%
Total		**12,852,000**	**66,000**	**410**	**242,860**	**2,650**	**0**	**15,520,000**	
GCV area population		**1,747,080**							
Per capita		**7.34** tonnes	**0.77** tonnes	**0.3** tonnes	**0.14** tonnes	**0.002** tonnes		**8.8** tonnes	

Source: Tyndall Centre

To give an idea of the scale of the challenge by 2010, the UK will have emitted 1.8 gigatonnes of carbon, so that if we are going to achieve the 80% reduction by 2050, only a further 2.8 gigatonnes can be omitted. This equates to the start of a continuing decline in emissions post-2015. This means that the first Strategic Development Plan for the GCV area will cover in detail the time period when the downward emissions trajectory begins (see graph below) and policies to achieve this reduction will have to be successfully implemented.[14]

It also goes some way to identifying which partner agencies need to develop policy and projects in each emissions sector. This type of governance approach to the development and implementation of spatial strategies is in line with the Scottish Government's recent announcements on streamlining the planning system and involving agencies directly in plan development. The graph opposite highlights the scale of the challenge that faces stakeholders across the region. Please see our website for more details of this project at

These challenges provide a major concern for the GCV area's economic competiveness. The area's successes have been primarily driven by unsustainable natural resource use and consumer consumption patterns. With the scale of reductions required in order to meet the targets there may be a requirement to change our approaches to these issues if we are to enable sustainable economic growth.

The growing global demand for resources comes at a time which is seeing global resources beginning to dwindle. The issues we could be facing are declining energy resources, diminishing water stocks, and fewer raw materials. This has implications for migratory patterns across the globe. This growing demand is best illustrated in this graph[15] online.

Climate change could have some direct impacts on the GCV area. Firstly, what would be the impact of climate change on current, and future, built environment and infrastructure? Secondly, due to the regions geography increased flooding could also be an issue for future land use allocations.

14 http://www.tyndall.ac.uk/publications/briefing_notes/Livingwithacarbonbudget.pdf
15 http://www.newscientist.com/article/mg20026786.000-special-report-how-our-economy-is-killing-the-earth.html?full=true

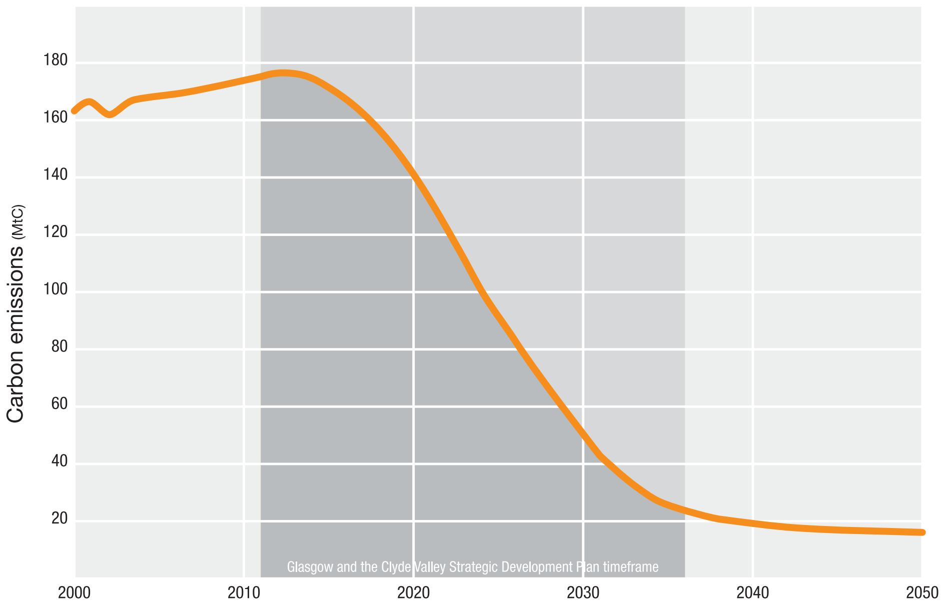
Environmental

Key drivers

1. Political Imperatives
2. Economic Impacts
3. Dwindling resources in the face of growing global demand:
   - Energy
   - Food
   - Water
   - Raw materials
   - Changing migration patterns
4. Impact on built environment and infrastructure
5. Flooding

Policy implications

1. 80% cut in CO_2(e) by 2050.
   How will we do that? What sectors will we have to focus on?
2. Can we have a sustainable and competitive region?
3. This will have serious implications for future energy arrangements, economic competiveness, consumption patterns and land use requirements.
4. What impact will climate change have on current and future infrastructure?
5. What would increased flood risks mean for future land use and land release?



Source: Tyndall Centre

Educational drivers of change

Education will be an important sector if the GCV area is to be successful in a global environment. The regions economy has evolved from a traditional manufacturing base to increasingly service and knowledge intensive based industries. This shift has meant a change in the skills requirements of employees. The future will also see the demand for new skills. This will include increased ‘soft skills’ such as, human interaction and developing the social capital of employees and organisations. There will be an increased emphasise on exercising judgement and experience in day to day activities. Lastly the workforce will have to be prepared for lifelong adaptability in there working lives.

Scottish student numbers will decline post 2019. This will mean that the GCV area may be reliant on non-indigenous students to boost the numbers. This may have implications for long-term funding of the higher education sector. For example, there may be the call for the introduction of student fees in order that Scottish universities remain competitive with their other non-Scottish competitors. Fewer students could lead to universities merging. These funding dilemmas could lead to a two-tier higher education system that polarises students learning experiences and ultimately has a detrimental impact on the GCV area’s competitiveness.

Lastly, the education sector will forge even closer links with the commercial world in order to fund and profit from the commercialisation of certain areas of their activities such as Life Sciences.

Educational

Key drivers	Policy implications
1 Appropriate skills sets	1 Will the region have a workforce with the 'right' skills? • Human interaction and social capital • Exercising judgement and experience • 'Emotional literacy'
2 Student numbers declining post-2019	2 We could be reliant on non-indigenous students
3 Funding	3 What future funding mechanism might we require? There is the potential for merging higher education institutes and an overall decline in educational standards
4 Increased coupling of Research and Development and its commercial potential	4 Increased joint working between academia and business, especially in areas such as Life Sciences and Bio-technology

Sociological drivers of change

In societal terms across the GCV area will have to be more aware of the negative impact that some of the health trends are projected to have on the population and the associated public services.

The three main health trends we need to plan for will be:

- an ageing population
- increased levels of obesity across the population
- higher incidences of mental health issues

There will be changing work patterns at play across the region. An increasingly healthier, but ageing, population will mean that the age of retirement will rise and that the older sections in society will play a more active role in both social and economic terms.

Flexible working may also become a more prominent feature. Flexible working patterns may become the norm for certain non-essential sectors. This will have repercussions for travel to work patterns as more people are able to work from remote locations Flexibility will also make it easier for parents to re-enter the workforce and this will be driven by increasingly family friendly polices being adopted by organisations. This will be driven by the need to have the most effective workforce possible in light of the shrinking working age population demographics.

Consumers' demands appear to be changing and they do not want standard services or products and could increasingly want personalised and tailored outcomes to both. For example, the English Health Boards have adopted a personalised approach to their personal care programmes.[16] This has meant that instead of the Health Board providing a one-size-fits-all care plan to meet the patient's medical requirements. They have decentralised the power to the patient so that they themselves can create a personalised healthcare plan - in association with healthcare professions - which meets their needs. A similar approach can be seen being adopted by the private sector. For example, the proliferation of mobile phones contracts which meet the specific requirements of the consumers demonstrates this. Consumers themselves will be increasingly fickle, demanding, and middle aged. The demands will be driven by a need for authenticity, experience and quality of services and products. Consumers will be willing to pay a premium to achieve this.

At a societal level - globally, nationally and regionally - there will be increased inequality and increasing polarisation between the haves and have nots. This has real implications for managing social tensions that are created by the growing divide.

One of the key issues society could face will be how it reconciles economic growth and social cohesion. If continuing global growth continues, then due to our demographic trends across the region we will be reliant on sustained immigration to boost our economy. This could raise two issues for the Government. Firstly, it will have to supervise the technical immigration issue around skills gaps in the economy. Secondly, it will have to manage the public perception of immigration.

16 http://www.nhs.uk/YourHealth/Pages/Creatingacareplan.aspx

Sociological

Key drivers

1. Health
2. Changing work patterns
3. Changing consumer demands and the ‘choice agenda’
4. Increased polarisation and inequality
5. Economy vs Social cohesion

Policy implications

1. What impact will the following have on the GCV area?
   - Ageing population
   - Increased obesity
   - Increased incidence of mental health issues
2. How might the GCV area adjust to:
   - End of retirement
   - Impact of technology on work patterns
   - Flexible working impacts on travel patterns
   - Flexible working and end to ‘9 to 5’
   - Family friendly polices, such as maternity leave
3. How will the GCV area adapt to consumers who are:
   - Fickle, demanding, middle-aged
   - Driven by authenticity, experience and quality
4. How will we deal with the growing gaps between the haves and the have nots and the associated social tensions?
5. The economy could be built on sustained immigration. So what would be the push and pull factors that we would have to adopt to attract workers here? How will we manage public perception of immigration?

Political drivers of change

Devolution will remain a key driver of the regions political landscape. The relationship with Westminster will still be crucial and there may be continuing tensions dependent on who has control in either political centre.

The devolved Government's polices will give a different dimension of how we are going to have to do things differently.

For example:

- the ambition to raise the Scottish GDP to UK level by 2011
- an 80% CO_2(e) emissions cut by 2050
- 35,000 homes built per annum

Single issue politics will continue to play a role. There will still be the same importance placed around issues such as health, education and welfare. But there will be an increased interest in environmental matters and areas such as transport.[17] This trend could also see the weakening of traditional political ideology. Instead of the traditional left and right, we could see more general issues such as freedom, low tax and personal independence.

There could be the potential for resource conflicts. For example, by 2019 the UK health expenditure will double from current levels.[18] This will have a huge impact on public spending levels. There might be tensions between health expenditure and also the growing impact of climate change. The political landscape could be one of prioritisation.

Quality of life issues will become increasingly important. In recent years we have seen a growing influence and mainstream acceptance of how these factors can help a city region compete.[19] The focus could be on developing the ‘pull’ factors. For example, the elements that would attract economic migrants into the GCV area. These could include environmental and social factors to the more traditional jobs and schools aspects. Political concepts such as well-being and happiness might become more accepted and could impact on subsequent policy. However, the state may actually become more intrusive in certain sectors, for example, an interest in peoples health and fitness levels.

17 *Britain in 2010: The New Business Landscape,* Scase, Richard, Foresight, Oxford, 2004
18 *Going Global: Key Questions for the 21st Century,* Moynagh, Michael and Worsley, Richard, A&C Black, 2008
19 *The Rise of the Creative Classes,* Florida, Richard, Basic Books, 2004

Political

Key drivers	Policy implications
1 Devolution	1 What impact on the region will the following have? • Continuing tensions with Westminster • Scottish GDP to UK level by 2011 • 80% CO_2 emissions cut by 2050 • 35,000 homes per annum
2 The continuing rise of single issue politics	2 New policy emphasis on emerging issues such as environment, transport and the transport and disposal of food waste.
3 Resource conflicts	3 By 2019 the UK health budget will have doubled. But we will have a shrinking working age population potentially resulting in less tax receipts. We might also face increased spending in climate change matters. How will we priorities the spending?
4 End of ideology?	4 With a decline in the traditional left and right. The future could be about catching floating voters with issues such as 'freedom' and low taxation.
5 Quality of life issues	5 What will be the 'pull' factors to attract economic migrants? Will it be improved environmental, lifestyles to the more 'traditional' jobs and schools factors. • What would policy based on well-being and happiness mean for the GCV area? • What impact would increasingly intrusive Government policy have for the GCV area, for example, around health issues?

Technological drivers of change

Universal internet connections will be the norm and people will always be 'connected'. The proliferation of higher net usage will also bring other issues with it. Increased data flows and security issues will be more common place due to our increased reliance on the internet as a social and commercial tool.

The internet will also drive how people and organisations communicate and carry out tasks. The development of *open source* - an example being Wikipedia - will become commonplace along with the concept of the *rise of the amateur*. These are non-professionals carrying out previously professional or specialised tasks will be an important driver of both technology and commerce.

The idea of *crowdsourcing*[20] - where internet users are asked to find the solution to a problem - will become increasingly standard practice in both the public and private sector. Finally, the concept of the consumer becoming the producer of a service and/or product will be driven by technological advancement and the *personalisation agenda* stated earlier in the **Sociological key drivers** section.

Information and communication technology (ICT) infrastructure will increasingly become paramount to sustain and build the GCV area's competiveness and connectedness.

Nanotechnology is considered likely to impact on all aspects of society. At present the applications are impacting on medicine, electronics and ICT. So there are issues for energy sources, materials and improved ICT connectivity speeds. Life Sciences will become more prominent in terms of economic development and its medical potential. This trend could, in part, be driven by Government policy in dealing with our changing demographics and also the development of personalised medicines.

Despite our attempts to tackle climate change through a range of mitigation policies there will still be a drive to provide a technical solution to help combat the issue. These solutions will range from the realistic - cloud seeding and carbon capture - to the more outlandish. As we edge closer to our politically driven emissions targets the use of technology may proliferate and therefore technology will be seen as one of the sources of solutions behind tackling this issue although this will be dependent on science advancing at the relevant pace.

Online communities will increasingly play a role in both public and private spheres. The continuing popularity of online social networks and blogs demonstrate that these platforms are an accepted way for people to communicate and contribute to debate. This movement has been increasingly successful in political issues - the recent American election where the internet was harnessed for a source of political funding - and e-democracy will play an important part on how the public interacts with the political system. This will have implications for how public and private sector organisations operate as there will be enhanced scrutiny of their activities.

20 *Wikinomics,* Tapscott, D and Williams, AD, Portfolio, New York, 2006

Technological

Key drivers	Policy implications
1 Always connected	1 This will have implications for our ICT infrastructure
2 Increased data flows and security issues	2 Will there be a backlash on privacy issues?
3 The impact of *open source* and associated changes to organisations' structures and processes	3 Will businesses in the GCV adapt to this changing business environment?
4 ICT Infrastructure	4 There will be increased demands on the regions ICT infrastructure
5 Nanotechnology and stem cell research	5 These technologies could have a profound impact on our society in a number of ways. The main area of interest to the GCV area would be how they could be used to improve health across the region
6 Geo-engineering to combat climate change	6 This could include cloud seeding to more outlandish ideas and what could it realistically mean for the GCV area?
7 New communities • Online social networks • e-democracy • blogs	7 These networks have provided a new outlet for people to comment on all range of topics form local democracy to environmental issues. This has led to increased participation in these types of areas. This could mean a greater public interest in similar topics.

Organisational drivers of change

Consumers and service users will be increasingly interested in how an organisation conducts its operations. For example, there may be increased examinations around the environmental impacts of an organisation's undertakings.

Organisations want to minimise their overheads and therefore would like to produce their service or product to economy of scale principles. For example, the more you make / deliver the cheaper the costs to the producer. However, due to increased demand for personalised products and services organisations will have to find a way to meet these requirements. For example, the global organisation McDonald's has had to create *regional* dishes for restaurants due to the diverse range of cultures they operate within.[21]

Finally, the concept of managing knowledge may well be a key aspect for organisations in the future. The shift towards knowledge intensive industries will require a new approach to dealing with gaining and sharing knowledge as well as managing people, chains and outcomes. For example, there will be the increasing dissolution of traditional top down organisational structures and management processes. These could lead to the proliferation of *ad-hocracies* these are informal structures that come together to deal with a specific task and then disband once it is complete.[22] So organisations would have to become increasingly adaptive, creative and knowledge based.

21 | 22 *Going Global: Key Questions for the 21st Century,* Moynagh, Michael and Worsley, Richard, A&C Black, 2008

Organisational

Key drivers

1 Transparency

2 Personalised scale

3 Managing knowledge

Policy implications

1 The public will be increasingly more aware and interested in how the private sector operates. This could relate to how supermarkets transport food good in terms of carbon footprints. Technology will make the scrutiny of business easier, therefore existing business models may have to change.

2 Consumers will not want the standard product. So business will have to meet the personalised demands of the consumer but still try and keep production and service costs down.

3 Organisations will be less command and control and their will be a greater emphasise placed on informal structures within and between organisations.

An example of this will be the increased roles of *ad-hocracies* where different groups come together to undertake a project - each group completes a different task - then when the project is finished the groups disband. Will organisations within the GCV area be flexible enough to accommodate this concept.

Sources

Eckton, G *Strategic Development Plans and the 2050 Target,* **Scottish Planner** Issue 126, page 4, December 2008

Experian Retail Expenditure (Fine) Report [2008]

Florida, R [2004] ***The Rise of the Creative Class, and how it's transforming work, leisure, community and everyday life,*** Basic Books

Johnson, G and Scholes, K [1993] ***Exploring Corporate Strategy***, Prentice Hall

Moynagh, M and Worsley, R [2008] ***Going Global: Key Questions for the 21st Century***, A&C Black,

Scase, R [2004] ***Britain in 2010: The New Business Landscape***, Foresight, Oxford

Tapscott, D and Williams, AD [2006] ***Wikinomics***, Portfolio, New York

http://listverse.com/history/top-30-failed-technology-predictions/

http://www.newscientist.com/article/mg20026786.000-special-report-how-our-economy-is-killing-the-earth.html?full=true

http://www.nhs.uk/YourHealth/Pages/Creatingacareplan.aspx

http://www.gcvcore.gov.uk/climatechange

http://www.gcvcore.gov.uk/downloads/MetropolitanGlasgow2008to2013.pdf

http://www.foresight.gov.uk/Horizon%20Scanning%20Centre/GoodPractice/Toolkit.asp

http://horizonscanning.defra.gov.uk/

http://www.waverley-consultants.com/waverley.aspx?a=3&b=1

http://www.tyndall.ac.uk/publications/briefing_notes/Livingwithacarbonbudget.pdf

http://hsctoolkit.tribalctad.co.uk/content/view/42/36/ions

http://findarticles.com/p/articles/mi_hb5245/is_/ai_n29247903

http://www.futuremelbourne.com.au/wiki/view/FMPlan/StoriesOfFuture

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