

Dublin at the Crossroads

Exploring the Future of the Dublin City Region

Final Report







Dublin at the Crossroads

Exploring the Future of the Dublin City Region

FINAL REPORT

June 2009

The Futures Academy
Faculty of Built Environment
Dublin Institute of Technology

PROJECT TEAM

Project Leader: Professor John Ratcliffe, Dean and Director of Faculty of the Built

Environment

Project Manager: **Dr Ela Krawczyk**, Head of The Futures Academy

Report Authors: Dr Ela Krawczyk & Paolo Ronchetti Researcher at The Futures Academy

Project Consultants: Brian Hughes, Department of Real Estate, Fellow of The Futures Academy

Conor Skehan, Head of the Department of Environment and Planning, Fellow

of The Futures Academy

Henk van der Kamp, Head of the School of Spatial Planning

Sponsors: The Futures Academy

Dublin City Council

Dublin Chamber of Commerce

ACKNOWLEDGMENTS

We would like to thank sincerely all participants for their time and insights. The full list of workshop participants and people we interviewed is enclosed in Appendix 1. We would also like to acknowledge our sponsors, Dublin City Council and Dublin Chamber of Commerce for their financial support.



The Futures Academy is an applied research and strategic consultancy organisation that was established in January 2003 in order to promote a fresh and more effective approach towards long-term planning. It is located in the Faculty of Built Environment at the **Dublin Institute of Technology**, Ireland. Through the application of futures thinking methods, the Academy aims to promote new ways of exploring and preparing for the future. The Academy's approach is underpinned by a basic assumption that the future is not predetermined and can be shaped and prepared for by those who employ a proactive attitude. We see our role as that of creatively exploring possible, probable and preferred futures for Ireland and different aspects of Irish life. We also aim to assist organisations in detecting and analysing present and prospective changes and their implications, exploring possible futures and identifying and formulating decisions and policies that will stand the test of time.

Dublin has long enjoyed a reputation as a wonderful city, in terms of quality of life and quality of its people.

In these turbulent times, there are clearly challenges ahead. We have choices to make, but that is the great thing: we can actually look at our own destiny and see how we are going to form and shape the city. We cannot just let it shape itself in an indiscriminate way. We have to find a root that values the active participation of as many of our citizens as possible and their willingness to move forward together. The seeds of our future are sown in the past and they are very strong, but they will only be brought into our present if we plan properly, and if we work towards engaging all of our citizens.

The reality is that economics will always find its level and eventually the economy will self-perpetuate in some way or another. What is a greater challenge is our society, where that is going, and how we are going to manage it. We do not have to allow the economy to go wildly forward again, another wave of affluenza, with society still not answering many of the questions that we need to answer. During the period of the Celtic Tiger, we certainly developed economically very well, and that growth did allow us to address some of the social issues that needed to be addressed in the city. However, many of them still remain overlooked.

- What are we doing to readdress the balance in a society which values the young over the old? What are we doing to bring back the older people whose experience is a valuable asset to the city?
- How do we develop community leaders? How do we cultivate civic engagement and civic participation? How do we ensure that men and women that do not need something from the city but have an awful lot to give are brought back in?
- Why are the brightest and the best young people not going into politics? Why is it that people feel that politics is simply something that you do if you want to get something out of it, and find it very hard to believe that the raison d'être for being into politics is that you want to give something to your community?
- What is the Dublin culture of today? In the debate between integration and multiculturalism, how do we merge the incoming cultures while remaining very close to the culture that we had?

The reality is that the future, the democracy, and the well being of our city will depend on our civic engagement. It will depend on the strength of participation in, and identity with, the city by people old and young, but we need to find ways to foster that. We already have a city development plan and an economic development plan, but we still lack a social development plan.

Dublin *is* a wonderful city in terms of quality of life and quality of its people. But we need to mind that quality - it is a very fragile flower.

Eibhlin Byrne Lord Mayor of Dublin, 2008-2009



CITIES—A Prospective by Professor John Ratcliffe



As we move into the third millennium, two driving forces stand out which will be significant in conditioning international cooperation in the 21st century: the progressive urbanisation of the globe; and the devolution of powers and responsibilities to local authorities and civil society. At the end of my first year in this country, and with these trends in mind, I began to think of Ireland as a 'city state'. A capital central city connected to a cluster of co-dependent conurbations. This concept has been reinforced ever since. The more so with my recent involvement in a World Cities programme orchestrated by the Urban Land Institute where the following guidelines for framing an effective urban agenda for cities, city regions and city states have formed in my mind.

- Never forget the basics. There is a continuing need to promote the provision of fundamental services that make city life 'clean, green and safe'.
- Be authentic. Acknowledge the unique identity of a particular city, playing to its strengths, avoiding direct copying from others and seeking to be best in class at something.
- Plan and build for sustainability and liveability. Place environmental issues at the forefront; let sustainability guide decision-making; share best practice; seek continuous improvement one project at a time; and optimise stewardship in the use of natural resources.
- Connect transportation and land use. Produce a transportation plan that
 fully integrates residential, employment, retail, educational and recreational
 activities, recognising that we cannot build our way out of congestion.
- Create infrastructure as a framework for development. Construct financially viable infrastructure programmes that allow for flexible development and growth whilst addressing social and human needs that connect locally, regionally and globally.
- Use the public realm as a source of civic pride. Encourage the creation of public spaces, accessible to all, that foster community identity and free the human spirit.
- Commit to social equity. Establish a transparent property rights system that promotes inclusion and provides well-integrated affordable housing dispersed throughout the city.
- Embrace diversity. Be open to immigration and different lifestyles, celebrating political, economic, social and cultural diversity.
- Be visioning. Take a long-term view, building public, private and community support whilst thinking outside municipal boundaries – reinvent or die!
- Lead. Sell the vision: forging alliances, appointing champions and building bridges. Think globally and implement regionally and locally.

Recognising Dublin as the 'first city' of the region, the state and the island, there is a need for visionary city leadership to create a city of the future which is driven by collaborative strategies; finding strengths in diversity, partnership and citizenship participation in the community-building process. Such leadership must reach from neighbourhood, to regional, to global, delivering services efficiently and coping effectively with urban problems such as security, education, housing, transportation, infrastructure and environmental degradation. Above all, perhaps, the stewardship of successful cities such as Dublin should sustain 'places worthy of our affection'. Leadership, however, can take us so far – ultimately it is all about personal responsibility.

Table of Contents

Foreword	5	
Cities—A Prospective	6	
Synopsis of the Scenarios	8	
Dublin at the Crossroads	9	
Background of the Project	10	
The Futures Approach	12	
Set the Strategic Question	13	
Drivers, Issues and Trends	14	
Demography	14	
Society	16	
Governance	18	
Economy	20	
Environment	22	
Technology	24	
Key Uncertainties for the Future of Dublin City Region	26	
Scenario Logics	27	
Future Scenarios	28	
Scenario 1: Feet of Clay	28	
Scenario 2: Winds of Change	32	
Scenario 3: The Lost Decade	37	
Policy Actions and Recommendations		
Economic Development	41	
Governance	42	
People and Quality of Life	43	
Built and Natural Environment	44	
Creativity and Innovation	45	
Final Thoughts	47	
Bibliography		

Appendix 1

Synopsis of the Scenarios

Scenario 1: FEET OF CLAY

In 2030, the Dublin city region, with its 2.5 million people, is the key part of a large polycentric urban region and the economic engine of the island - the Eastern Conurbation. The Dublin city region, governed by an elected Mayor is a complex patchwork of modern public transport infrastructure, high-tech parks, 'corp-towns', 'cloud-centres', gated communities, ghettos, urban waste land, wind-farms and scarce green spaces. The economy is thriving as bio- and nanotechnologies industry, agri-business and global financial software cluster are advancing every year.

And although many people enjoy the economic success of the city, mounting environmental pressures, such as water shortages, flooding, coastal erosion and biological pollution are becoming a significant threat. Materialistic and individualistic attitudes fuel further fragmentation of the society. The gap between rich and poor increases systematically and city is marked with black spots of unemployment. Riots and social unrest have intensified in the years up to 2030 and new social movements, often closely linked to religious groups start to emerge. Something sinister is brewing beneath the surface.

Scenario 2: WINDS OF CHANGE

In 2030, the Dublin city region forms a part of one of the two main urban regions on the island – the Eastern corridor. The Dublin Metropolitan Authority governed by a directly elected mayor has subsumed the four local authorities. The world is a greener and a more just place. Dublin citizens enjoy good quality of life, efficient public transport system and more even society, although they are much less wealthy than in early 2000s.

The modest but stable economy reflects the importance of environmental issues. Dublin specialises in global emission trading services and green product design, development and marketing. Additionally it is globally recognised for innovation in nano-technology and healthcare. Collaboration between main universities that were forced to share limited resources produced high quality education free to all.

Although government controls and regulates people's lives much more, people appreciate the stability that goes with it. Overall, in 2030, the Dublin city region is doing well. Yet, going into the future it faces new challenges as competition from the Western Corridor intensifies while its own energy and drive linger.

Scenario 3: THE LOST DECADE

In 2030, the Dublin region with a population of 2 million is still the economic engine of Ireland, although it has lost its international competitiveness and appeal. The prolonged recession and political turmoil of 2010s had a damaging effect on the city, which now struggles with unabated urban sprawl, poor public transport, crime, racism and social exclusion.

The region's economy is relatively stable. Creative and entertainment industries, 3D simulation and gaming, data-management and information-processing centres, heritage tourism, small-scale manufacturing and services generate modest yet comfortable income levels. The quality of life is poor for many. Unsustainable spatial development patterns are the cause of chronic congestion, reduced mobility of different social groups, and are costly both for residents and the local government.

The society is now much more inward looking with strong city and national identity. A new set of values embracing personal responsibility, solidarity and equality is emerging. Social innovation, collaboration, and creative solutions are becoming a trademark of Dublin.

Although the region in 2030 still struggles with many social and environmental problems, positive social changes together with a renewed spirit of the city makes the future hopeful.

Dublin at the Crossroads

The 21st century is the 'century of cities'. Urban regions are the centres of human activity, the powerhouses of progress and the engines of economic growth. Dublin is the biggest and, by EU definition, the only Irish city. Almost 40% of Ireland's population live in the Greater Dublin Area and almost 50% of its GDP is produced there. Dublin is pivotal to the success of both Ireland overall and its various parts.

Today, after almost two decades of unprecedented growth, Dublin – like the whole Irish nation – stands at the crossroads under a cloud of uncertainty. It faces the same urgent questions as other cities (and nations) face worldwide: What financial and economic model will emerge from the current crisis? Will the green revolution occur in time to lessen the effects of climate change? How might the world economy cope with natural resources becoming scarcer? Can the world unite to address the emerging threats or will it divide? Can the gap between rich and poor finally start closing or will it grow even further apart?

However, Ireland and Dublin have their own questions to answer: What Ireland will emerge after the crisis? Which values and aspirations will drive people's choices and actions? How can a sustainable knowledge economy be built with current scarce resources? What governance structures will enable rather than hinder the expanding Dublin region? With sharpening competition from rapidly developing cities worldwide, will Dublin be able to maintain its competitiveness and remain attractive?

There are no simple answers to these questions. The future is risky, complex and uncertain. In this study, we aim to develop a better understanding of the forces at play, and explore the possible consequences of their interactions and what this all means for the Dublin city region. By applying a futures approach, we have sought to take a long-term view and identify what futures are possible, probable and preferable for the region. By involving a broad range of stakeholders from local government, business, arts, culture, education, politics, religion, justice and other areas of civic society, we have also attempted to facilitate a discussion about the future of the city region and forge linkages between unlikely allies.

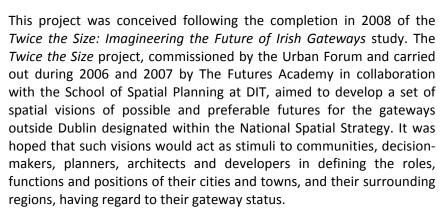
Above all, we hope that the findings of this report will help to identify a range of possible actions that can be undertaken to prepare for the future and to inspire thinking, planning and decision-making for the long-term future



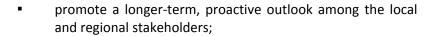


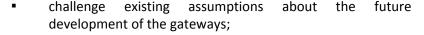
Background of the Project





The study employed a futures methodology – Prospective Through Scenarios. By using this approach, the project intended to:





 encourage alternative ways of thinking about the future in a rigorous and systematic manner;

 develop an understanding of what futures are possible and desirable and how the gateways can prepare for what the future may bring; and,

 create a platform where stakeholders can meet, think and discuss the future of the gateways in a neutral setting.

Initially, the project focused on the scenario of a doubling in the population of the Irish gateways, the implications for these areas of such an increase, and the issues that would need to be addressed in order to prepare effectively for these changes. However, through the use of a futures approach, the scope of the study broadened to embrace not only the future of individual gateways but that of Ireland as a whole, with an emphasis on its spatial development. In effect, it was found that it was not possible to study the gateways in isolation; their future and that of Ireland as a whole needed to be explored in conjunction.

One of the key messages that emerged from the study is the pivotal and dominant role of the Greater Dublin Area (GDA) in creating the future of Ireland and its gateways.





Analysis of the three scenarios of possible spatial futures for Ireland, developed within the study, has shown that the most sustainable way forward, both economically and environmentally, lies in strengthening and further developing the already existing critical mass on the east coast, centred on the GDA. Thus, the current National Spatial Strategy appears to be flawed, in that it tries to impede and offset the further development of the Eastern region through underinvestment and the devolvement of resources to other centres. Arguably, the Eastern urban region is the only area that already has the ability to sustain the sufficient critical mass needed to compete with other city-regions in Europe and globally in the foreseeable future.

The study recognised that it is necessary to provide all Irish cities and regions with ample development opportunities, but in a way that will not constrain but rather reinforce and strengthen the critical mass on the East coast. If the other regions are viewed as complementing rather than competing with the Eastern urban region, then its success is, and will continue to be, the success of the whole country. To achieve the goal of providing all regions with ample development opportunities, it is necessary to recognise the uniqueness of each region, and in particular the differences between the East and the West. Sustainable growth and prosperity can be ensured for individual areas if development objectives and policies are formulated that are specific to each, and that acknowledge their diversity and reinforce their strengths. Using a uniform set of policy objectives would boost the development of some regions and hinder that of others. One size does not fit all.

The report postulates that a radical rethinking of the National Spatial Strategy is also necessary to ensure a cohesive development of the island of Ireland. The continuation of the Northern Ireland peace process has benefited both sides of the Border in various ways. To strengthen and reinforce these benefits, especially from an economic perspective, both governments should develop a cohesive all-island spatial strategy. This should go far beyond the identification of cross-border linkages. The Dublin-Belfast corridor is widely recognised as a cross-border region, and is often compared to others such as the Øresund Region or the Alpine Diamond. However, as a cross-border region, it still lacks appropriate spatial policy provisions.

Perceiving that further research, specifically on the future of Dublin, was needed, The Futures Academy, together with Dublin City Council and Dublin Chamber of Commerce, decided in autumn 2008 to follow up the *Twice the Size* project and examine in detail how the Dublin city region might evolve over the next 20 years.

Cities are the future

"The evolving processes of globalisation have transformed the economic system so that it is now more internationalised, knowledge intensive and competitive. The main winners of such a system, where knowledge and innovation are the key source of comparative advantage, are cities, as they are the places that are most conducive to knowledge sharing, and to the consumption benefits attractive to the highly skilled workers required to make the knowledge sharing more productive."

From "Twice the Size? Imagineering the Future of Irish Gateways (2008)



The Futures Approach

A Futures approach, such as the *Prospective Through Scenarios* method used in this study (see *Figure 1*), offers a powerful means of exploring what might happen in the future and identifying strategic actions that need to be taken today to prepare for possible futures. It not only helps us to detect what is *possible* but, even more importantly, to recognise what is *desirable*.

The futures approach also establishes a highly effective platform for collaborative planning, and helps to develop agreed solutions and ensures that ownership of these solutions is embedded in the community so they have a greater chance of successful implementation.

Finally, it creates space for thinking about the long-term future, so that such thinking is not clouded by immediate problems and concerns, and it often facilitates the emergence of innovative ideas and novel solutions.

Scenarios, the primary method used in this study, are compelling pictures of alternative possible futures. They are not predictions or forecasts, but images that help us to imagine different possible future states. They enable us to portray complex, multilayered and multidimensional systems, such as cities, in a self-explanatory and engaging manner. Scenarios aim to simulate the thinking and understanding of policy and decision-makers and assist them in the testing and future-proofing of policies and decisions.

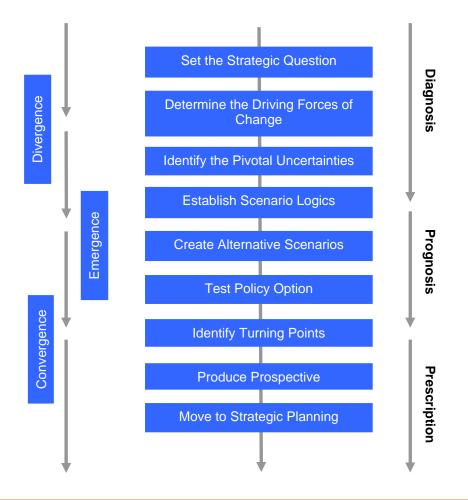


Figure 1: Prospective Through Scenarios process (Ratcliffe & Sirr, 2003). The Futures Academy.

The *Prospective Through Scenarios* process constituted the main framework for this study, within which a number of research activities were carried out:

A Futures Workshop. A one-day workshop, based on the *Prospective Through Scenarios* process, was held on 16th January 2009. The event brought together key stakeholders from a range of sectors: local government, business, culture, religion, tourism, transport, politics, architecture and education (a full list of participants is included in Appendix 1) .

Strategic Conversations. Seven strategic conversations with various stakeholders were held. These were used to obtain sectoral views, ideas and opinions on the issues, trends and events that will affect Dublin's development.

Environmental Scanning. A desktop research exercise was performed, which involved a review of reports, papers, newspaper articles and other conventional and less conventional sources, such as blogs, anecdotal evidence and documentaries.







Set the Strategic Question

As futures approaches may be used for many different purposes, from examination of changes in the external environment to investigation of a specific initiative, it is critical at the start of the project to clearly identify and formulate the strategic question, which will guide the entire process. In the case of this study an overarching strategic question was posed as:

"What might the Dublin city-region be like in 2030?"

Drivers, Issues & Trends Demography

Throughout the project we identified a wide range of driving forces of change, issues and trends that together will shape the world of 2030. In this report we classified these factors accordingly to their level of influence, be it global, national and local, and the sectors they represent: demography, society, governance, economy, environment and technology.

GLOBAL

- World population is expected to rise to over 8 billion people in 2030 and 9 billion in 2050.
 Most of the growth will take place in developing countries.
- The trend towards urbanisation will continue. Megacities (defined as those with more than 10 million people) will increase in number and proliferate over the next 20 years.
- The increasing population will affect developed countries through migration. This will likely give rise to social, economic and political issues in both receiving and sending countries.
- Inequalities between rich and poor will continue to grow. The poorest 40% of the world's population currently account for 5% of global income; the richest 20% account for 75% of world income.
- Rising birth rates and lower life expectancy will keep low the average age of people in developing countries.
- People in the developed world will live longer due to enhancements in the prevention of diseases. Most developed nations face a 'grey future' as their population age and dependency ratios increase.
- There will be 'intergenerational instability' due to the shifting notions of obligations and loyalty among generations. New attitudes, social contracts and uncertainties will emerge.

In examining the driving forces of change, issues and trends, several points should be borne in mind:

- No single driver will dominate.
- Each driver will have varying impacts at different times and in different locations.
- The drivers are not necessarily mutually reinforcing; in some cases they will work at cross-purposes.

NATIONAL

- The population of the Republic of Ireland rose from 3.4 to 4.2 million between 1991 and 2006.
 It is expected to increase to around 5.5 million by 2020 and 6.5 million by 2050.
- The national fertility rate has fallen from a little over 4 in 1965 to just below 2 currently. However, the country has one of the highest rates of birth in Europe, at around 15.5 per thousand.
- Male life expectancy has risen to just over 75 years and female life expectancy to a little over 80. By 2030, they are expected to rise to about 83 and 87 respectively.
- The Irish population is getting older. The average age is currently over 35. It is expected to rise to over 40 by 2030.
- Since the mid-1990s, non-indigenous inmigration has become a crucial factor contributing to accelerated growth. It is estimated that immigrants will account for half of the total population growth between now and 2030.
- The housing boom in recent years, to meet the burgeoning population, has led to a massive increase in suburbanisation, a decline in town and city-centre populations, and urban sprawl.
- A major consequence of population growth occurring in the wrong places is pressure on infrastructure in outer suburbs and a decline in demand for schools and other facilities in central urban areas.
- The country's suburbanisation has increased dependency on cars and on petrol. The average car in Ireland travels 70% more than in France or Germany, 50% more than in Britain and 30% more than in the US.
- Ireland has become the fifth most oildependent country in the EU, and the ninth most dependent in the world, at a time when oil is becoming an ever scarcer and more expensive resource.
- Urban sprawl is believed to cause serious health problems, such as obesity, for many people, as well as social isolation.

LOCAL

- Population in the GDA has been growing steadily during the last 20 years; between 1996 and 2006, it rose by 18%, from 1.4 to 1.7 million.
- According to the most recent estimates, population in the GDA will increase to 2.3 million by 2020 and 2.8 million by 2030, respectively a 37% and a 68% increase over the 2006 total. A mix of natural growth, in-migration and returning emigrants will account for the increase.
- Dublin has a young diverse population. Half of the population of Dublin County is aged between 10 and 39.
- The Dublin region has the highest percentage of non-Irish nationals, 14.5%, in the country. At county level, Dublin City (17.2%) and Fingal (15.6%) have the highest rates.
- The policy of decentralisation (relocating publicservice offices to areas outside Dublin) has had mixed reviews and limited success. Creating a new major urban centre is considered in some quarters to be the most attractive solution.
- Two of the most evident side-effects of the steady growth of the Dublin city region during recent years are suburbanisation and urban sprawl, due to both poor and passive planning policies.
- The suburbanisation and urban sprawl have put great pressure on infrastructure, especially water, sewerage, roads and social facilities.
- The suburbanisation and urban sprawl have had damaging environmental and social effects – by increasing dependency on the car, which in turn increases the emission of pollutants; making commuting trips longer; increasing the rates of obesity and social exclusion, and in general reducing the quality of life.

DUBLIN TODAY

- * 28% of Ireland's population lives in Dublin County which covers only 1.3% of the surface area of the country.
- * Nearly 40% of the total population live in the Dublin city region which represents 10% of the country's total surface area.
- * The population of Ireland increased by 8.2% between 2002 and 2006. The Mid-East region had the largest increase (15.2%). Dublin County had the smallest increase (5.7%).
- * In 2006, the Dublin County had by far the highest population density, at 1,295 people per square kilometre. The density of the Dublin and Mid-East regions together was 239 people.
- * The Dublin city region had the country's highest proportion of people with a third-level qualification, among those who had completed their full-time education. In 2006 a total of 35.9% in Dublin County had a third-level education, compared to 33.4% in the Dublin city region and 29% nationally.
- * Dublin County is home to 615,000 workers. Over 200,000 work within the area bounded by the canals, such as the IFSC, the growing legal district south of the Liffey, the retail and tourism sectors, and in 'new economy' companies.

GLOBAL

- World society is going through a period of cultural modernisation. Fundamental principles of modern cultures, such as equality, personal freedom and self-fulfilment, are prevailing over more traditional values such as acceptance of authority, obedience and self-discipline.
- The greatest threat to future world order and peace is the clash of civilisations or social groups, rather than countries. Potential flashpoints lie where different civilisations or communities meet.
- A combination of technological, market and geopolitical events has levelled the global economic playing field in a way that enables more people than ever, from more places, to take part in the global economy and to enter the middle class.
- Technological innovation, in particular in the ICT sector, has made the world smaller. Awareness is growing of the interconnectivity of issues, events and people.
- Rising standards of living have allowed more and more people to become more mobile and connected, and thus exposed them to new ideas, relationship and places. Creativity and innovation are eroding traditional social, economic and national barriers.
- A new business culture is emerging, that is based more on principled leadership than on the pure profit motive. Ethics, social justice and environmental stewardship are gaining importance.
- The craze for consumer goods is likely to continue, driven by an even more integrated global economy and consumers in developing countries who aspire to the lifestyles of developed countries.
- Demand for greater scrutiny, transparency and accountability across all sectors of society will continue. Simultaneously, advances in information technology will increasingly raise questions about security, surveillance, control, access, privacy, crime, taxation, and propaganda.
- It is possible to discern a movement in society towards a rediscovery of certain fundamental values, a shift from materialism towards more enduring philosophical and spiritual values.

NATIONAL

- Irish society has undergone huge transformation during the last 15 years, which resulted in a much higher standard of living. Ireland has become a modern and forward-looking nation, confident to compete on the world stage.
- Despite the recent prosperity, many problems remain, mostly related to the overall quality of life. Chronic congestion, inadequate housing and the poor quality of public services mean that, although people are wealthier, daily routines for many are more difficult.
- Poverty and social exclusion still persist both in rural and urban areas. Ireland is among the EU member states with the greatest gap between rich and poor.
- Since the 1990s, society in Ireland has gone through a secular transformation. People have increasingly questioned the role of the Catholic Church and abandoned aspects of its social doctrine. Church attendance rates have plummeted.
- The long-held and much-prized qualities and values of Irish culture are in serious danger of being eroded by an increasingly selfish, greedy, materialistic, uncaring, and even violent mindset. The demise of traditional values, customs and beliefs, and the absence of newer ones to replace them leads to a growing feeling that the social fabric of the state is becoming weaker.
- The shift towards a more open, democratic and honest society is set to continue.
- The continuation of the Northern Ireland peace process is likely to result in a more integrated island of Ireland.
- The prevalence of alcohol abuse among Irish people together with the rise in drug abuse pose a serious threat to personal health and communal welfare.
- Ireland is becoming a risk-averse society.
 Managerialism and economic rationality are stifling creativity, individual initiative, wisdom and judgement in organisations, especially in third-level institutions.

LOCAL

- In recent years, the overall quality of life in the Dublin city region has deteriorated.
- Despite improvements in the provision of public transport, it is still insufficient. A more adequate transport system depends on projects such as Metro North, Metro West and the extension of the Luas being completed.
- In the central Dublin area, there has been an increased tendency towards building medium-rise brownfield developments, characterised predominantly by mixed use and apartment living.
- Despite the movement towards more sustainable construction and living, there is much room for improvement, especially at the level of strategic planning. The idea of a fully cohesive community with a strong sense of place is still far from reality.
- The Dublin city region has become more and more diverse and multicultural. Almost 20% of Dublin city residents and 15% of people living in the Dublin city region are not Irish nationals.
- There is increasing acceptance that both state and traditional institutions are not well positioned to deal with the issues we face today. As a result, community groups, both Irish and non-Irish, are beginning to take up the challenge and increasingly organising themselves in favour of a more cohesive society.
- The risk of social polarisation is strong. Friction between social minorities could lead to conflict, as has happened in other European cities. The way the current national recession is managed by the authorities and the way events play out globally will both impact on how the Dublin city region develops as a multicultural area.
- The Dublin city region is becoming more entrepreneurial. There is an evident increase in self-confidence and resilience, particularly among young people (probably as a consequence of the economic boom during the years of the Celtic Tiger).
- More and more people are getting involved in voluntary work. This could be interpreted as a natural reaction to increased materialism as well as a direct consequence of the recession.

DUBLIN TODAY

- * In the Times World University Ranking, two Irish colleges are ranked in the top 200 institutions: Trinity College Dublin (49th) and University College Dublin (108th).
- * Seven out of 10 Irish PhDs graduate from a Dublin university, and three out of four come from Dublin County.
- * In quality of life, Dublin city ranks 25th in the world and 8th in Europe (according to William M Mercer, 2008).
- * In 2006, 65% of people used their car or van to get to work in the GDA, similar to the 1996 percentage. The percentage of those who used public transport is also similar to that in 1996.
- * Around 30% of commuters in the Mid-East region travelled 25 or more kilometres to work, compared with around 6% in Dublin.
- * Around half of private households in Fingal (55.5%), Meath (53%), Kildare (51.2%) and South Dublin (48.9%) were owner-occupied with a loan or mortgage, in comparison with a national rate of 39%. The rate of rented accommodation was 20.6% nationally and around one-third in Dublin (35.9%).
- * The Dublin metropolitan area had the highest rates of criminal offences in many areas including: dangerous or negligent acts (72.6 per 1,000 population vs. 53.7 at the national level); burglary (8.3 vs. 5.8); theft (28.1 vs. 17.6); controlled drugs (4.6 vs. 3.4), and road & traffic offences (101.9 vs. 65.0).
- * In 2006 the highest rate of road and traffic offences was recorded in the Dublin metropolitan Garda region (101.9). The Mid-East (17.7%) region and Dublin City Council area (16.4%) had the highest percentages of licence-holders with penalty points.
- * Dublin and the Mid-East were the most physically active regions; over 66% of people aged 15 and over had participated in sport or physical exercise in the previous 12 months.

GLOBAL

- States might continue to be the dominant players on the world stage in 2030, but their governments will have less and less control over flows of information, diseases, migrants, arms and financial transactions across their borders.
- Non-state actors, ranging from commercial corporations to voluntary organisations, will increasingly play more important roles in both national and international affairs.
- The level of direct influence of national governments on people's actions, social economic problems, performance and corporate power will lessen. Power will pass to supra-national downwards to subsidiary authorities at regional, provincial or city level.
- In advanced economies, corporations probably have more impact on people's lives than governments, as the prime providers of goods and the principal source of employment.
- It is likely that growth in corporate social responsibility trends will continue.
- The concept of sustainable development will permeate policymaking at all levels. Peace, nonviolence and human security will increasingly be viewed as 'public goods'.
- The movement towards democracy and away from authoritarianism will continue, but the threat from theocracies through widespread fundamentalist thinking will be ever present.
- Transnational criminal organisations will become increasingly adept at exploiting the global diffusion of sophisticated information, financial and transportation networks.
- Individual communication and computing capabilities will be coordinated and combined to produce a new form of social power, enabling groups of people to organise their interactions and exchanges in new ways.
- The legitimacy, influence and success of worldwide agencies of governance such as the United Nations, the World Trade Organisation and the World Health Organisation will be central to the efficacy of global governance in the long term.
- The changing values driving the transformation of society will determine the way in which societies govern themselves.

NATIONAL

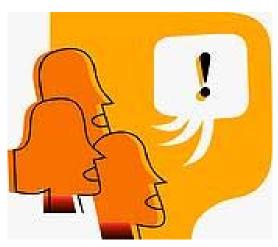
- Agents of government have to cope with more complexity, more uncertainty and accelerating change. There are more things to manage, with more constraints; more levels and connections in the decision process; and more voices and expertise to capture.
- Among Irish people there is an alarming lack of respect for society's institutions and a pervasive cynicism about politics and the agencies of government.
- The formation of a devolved Northern Ireland administration brought the hope of a peaceful and prosperous outlook for the whole island of Ireland, and the possibility of all-island governance structures in the future.
- Balanced regional development is generally accepted as essential to the nation's prosperity, but there is a lack of suitable governance structures and mechanisms for coordination, coherence and control in the regions.
- City regional governance with appropriate powers and resources is needed. Directly elected mayors, with executive power and accountability, for all the major towns and cities in the country would enable the vision and authority that a city or city region requires.
- More 'joined-up thinking' is needed in government at all levels. Planning processes within the various arms of central and local government, although improved in recent years, appear to take place with little reference to each other. Public projects of all kinds should be conceived, designed and implemented with all the stakeholders in mind.
- Irish political structures are characterised by their localist and clientilist nature. The national electoral system has many detrimental effects, such as inhibiting the taking of longer-term, radical decisions designed for the good of the public.
- The private sector must be harnessed in the pursuit of good governance. Public-private partnerships have helped to deliver national infrastructures and better public services. The introduction of business improvement districts will greatly enhance the vitality and viability of Irish towns and cities.

LOCAL

- The governance of the Dublin city region has been at the centre of public debate for a long time. It is recognised by many that Dublin's voice is not heard by central government and this situation needs to be addressed.
- Decentralisation of power to the city region level would allow better services to be provided in a more effective manner.
- Currently there is a lack of appropriate structures to properly tackle the many challenges the Dublin city region is facing and will face in the future.
- The current division of Dublin into council areas is artificial and does not reflect people's sense of local or regional identity.
- The Government recently proposed a reform of local government, including a directly elected mayor for Dublin. The mayor's strategic functions would include planning, housing, waste, water provision and waste disposal. The mayor would also act as chair of the Dublin Transport Authority.
- The Dublin city region badly needs an authority with responsibility for strategic planning and implementation of strategic policy.
- The reform of local government needs to address issues of responsibility and accountability. A clear link between taxation and local representation is required. A directly-elected mayor would have to be able to impose local taxes and provide services according to the money collected. The direct accountability of the mayor towards citizens could be achieved only through such provisions.
- The current economic crisis may offer an opportunity for implementing the local government reforms.
- The future of Ireland and Dublin will continue to be shaped by decisions and policies made at EU level.

DUBLIN TODAY

- * Over 28% of eligible people in the Dublin and Mid-East regions did not vote in the May 2002 general election. The main reason given by people in Dublin for not voting was that they were 'Away or too busy' (30.6%); the main reason given in the Mid-East was because they were 'Not registered' (36.1%).
- * The highest turnout countrywide for the Lisbon Treaty referendum was in the Dublin region (54.6%).



GLOBAL

- The networked global economy is increasingly driven by rapid and largely unrestricted flows of information, ideas, cultural values, capital, goods and services, and people.
- Capitalism seems to be the only economic system that has been seen to work anywhere; however, the speed and force of change are shaking its foundations. The 'eternal verities' of capitalism continuing growth, full employment, financial stability, rising real wages are threatened. A movement towards 'natural capitalism' might be an alternative.
- Creativity and innovation are essential for maintaining competitiveness. Experimentation, research and development in radical and increasingly multi-disciplinary and trans-disciplinary directions is the only way forward.
- The issue of energy is becoming critical for the future economic health and performance of the world.
- The growth of large emerging markets, such as Brazil, Russia, India and China, will have an increasing influence on the global economic and political stage.
- A maturing knowledge economy will require an enhanced and extended educational infrastructure addressing such pressing issues as the nature of childhood, extended adolescence, personal and social foundations, inequality and exclusion, changing family and community life, and life-long learning.
- Business is likely to increasingly adopt cooperative strategies, whereby the traditional business model organised around competition will be complemented by other models based more on collaboration, open-source access and new forms of human and machine interaction.
- New, stricter rules for the financial markets will be implemented as a result of the current financial crisis.
- There is a great deal of uncertainty concerning the economic model that will evolve as a consequence of the current financial crisis. Resource scarcity and productivity will underlie economic development in coming years.

NATIONAL

- Ireland's transformation from its agricultural base to one founded increasingly on high technology and an internationally traded services sector was accompanied by unprecedented economic growth and low unemployment levels.
- Competitiveness is the key to success, but Irish cost competitiveness has seriously declined over recent years, partly due to domestic price inflation and exchange-rate movements. This trend may be partly reversed due to the current recession.
- The development of a knowledge-intensive workforce is the key long-term source of competitive advantage. A changing world requires a flexible response to the development of human capital.
- Ireland's low-taxation strategy has been central to the economy's performance over the past decade, but the corporate climate has recently become much more competitive.
- Despite a decade of record investment levels, substantial infrastructure gaps still need to be addressed. The transportation network remains under pressure; communication technology is inadequate and incomplete; and congestion continues to limit the efficiency of the economy and reduce the quality of life.
- The country is excessively dependent on imported fossil fuels. There is a need to evaluate all energy technologies, including the potential of nuclear energy.
- An all-island economy represents an opportunity to enhance competitiveness, and develop greater economies of scale, larger markets, and deeper pools of knowledge and skills.
- The Irish manufacturing sector faces enormous challenges. High costs and high prices must be matched by high productivity and high quality. Government, business, employees and trade unions need to tackle the problems coherently.
- Over 97% of businesses in Ireland are 'small' (fewer than 50 employees). They employ a total of 777,000 people. The SME sector in Ireland is the potential engine for growth in the Irish economy.

LOCAL

- The Dublin city region is losing competitiveness when benchmarked against international cities, due to its high cost levels. Wage costs, office and industrial rental rates, mobile phone costs, IT fees and legal fees in Dublin are among the highest compared to cities worldwide.
- During the past two decades, Dublin has specialized in providing international financial services. Whatever happens in the world of finance after the current financial crisis, it is expected that, because of its skill base and the critical mass in the IFSC, Dublin will retain its niche in the financial markets.
- Dublin is home to the European headquarters of Google, Ebay, Microsoft, IBM, Dell and Yahoo. Because of the existing IT cluster, Dublin's position as a leading location for innovation and investment will likely continue in the future. However, this will depend on the supply of highly skilled and talented workers and good quality of life.
- The 'green economy' will likely be the next driver of growth after the credit crunch. Dublin already has the skills and the capacity to play a key role in the emerging carbon trading and renewable energy markets.
- Dublin, as the only Irish city able to compete internationally, is becoming more and more the 'face' of Ireland for visitors, workers and investors alike. The sustainable growth of the city region must be prioritized in the interests of the whole country.
- The current recession threatens the economic development of the Dublin city region, but it also opens up opportunities that must not be missed.
- As economic power shifts eastwards in the world, Dublin's location and Ireland's neutral position may enable Dublin to become a broker or an impartial trader between the global East and West.
- Building of the Metro North is likely to provoke new thinking about the economic corridor that is likely to develop around it. More collaboration between local authorities and rethinking of the function and planning of the surrounding areas will be needed.
- Growing collaboration between local authorities, industry and the education sector can pave the way for the development of a successful economic cluster.

DUBLIN TODAY

- * The Dublin city region accounts for over four out of every 10 jobs in Ireland, just under half of all goods and services produced, and nearly half of Ireland's tax revenue.
- * Dublin County had the highest Gross Value Added (GVA) per person at €48,580, compared with the lowest, €22,914, in the Midland region and the national average of €34,468 (2008).
- * Dublin was 13% above the state average for household disposable income, followed by the Mid-East at 1.3% above the national average.
- * Dublin County is home to 615,000 workers. Over 200,000 work within the area bounded by the canals in the IFSC, the growing legal district south of the Liffey, the retail and tourism sectors, and in 'new economy' companies.
- * In 2008, the Dublin city region secured 18 new IDA investments, totalling €240 million and creating nearly 1,350 jobs.
- * Almost 70% of workers in the Greater Dublin area were employed in five main sectors: financial and business services (20%), wholesale and retail (14.3%), manufacturing (10.9%), construction (10.6%), and health (10.4%)(2008).
- * After London, Dublin is the most expensive location to rent industrial or office space.
- * Waste-disposal costs per tonne of non-hazardous waste into landfill are more expensive in Dublin than in all the other locations benchmarked.
- Congestion in Dublin costs workers and businesses over €2.5 billion per annum.

GLOBAL

- Sustainability will define the next period in the same way that technology defines the current period. Despite growing awareness that sustainable development is essential, there is still a tendency to underestimate the extent and complexity of environmental problems, and to postpone timely action.
- The stewardship of the earth's natural capital will be a rising priority towards 2030 as we witness falling water tables, shrinking crop and pastureland, declining soil quality, diminishing fish stocks, disappearing forests, worsening air quality and growing climate instability.
- The reality of climate change due to industrialisation is now widely recognised. It threatens health, life, property and security, and demands the constant and progressive attention of governments, businesses and consumers up to 2030 and beyond.
- The way energy issues are tackled will shape the future conditions of the natural environment and the policy framework for the built environment.
- An impending crisis of water threatens to dwarf the energy crisis in significance and severity.
 Water use is already showing signs of being a major feature of foreign policy decisions across the globe and the prospect of 'water wars' looms large.
- Effective waste management will continue to be required, but one of the key insights of modern environmentalism is that waste material is a sign of inefficiency. Such inefficiency will be increasingly reduced either by introducing more thrifty processes, or by exploiting waste for other processes.
- The power of large corporations to shape the future of the planet has focused debate on the twin concepts of 'sustainability' and 'corporate social responsibility'. Towards 2030 it is probable that a new economics, based on the principles of natural capitalism, will start to emerge.

NATIONAL

- The environment is a key resource for Ireland. EU legislation has led to environmental improvements and protection measures across a broad range of areas, including water and air quality, species and habitats, waste management and the environmental licensing of industry.
- Under the Kyoto Agreement, Ireland has committed itself to limiting the increase of greenhouse gases by 2012 to 13% above their 1990 levels. However, emissions levels are currently 25% above, and Ireland's per capita emissions are among the highest in Europe.
- The growing awareness on issues, such as climate change and fossil fuel depletion, will drive the demand for sustainable construction. Builders, developers, suppliers, professionals, investors, owners and occupiers will need to educate themselves in sustainable principles, technology, materials and techniques.
- Many of the trends threatening sustainable development in Ireland, such as poor spatial planning and unbalanced regional development, result from past choices in patterns of land use and infrastructure investment, which are difficult to reverse in a short time-frame.
- Many local authorities are too big to solve small, local problems and too small to solve bigger, regional problems. Many also lack the managerial, communication and technical skills needed to make environmental planning work. To ensure effective spatial planning and efficient environmental resource management, a new organisational and administrative structure is needed.
- Two divergent futures are emerging for two different parts of Ireland. The North-West and South-West are likely to focus on extensive, low-intensity resource use and protection. Cultural, educational, residential and amenity values will become the principal drivers. The East, Midlands, and South-East will become organised around an increasingly intensified urban corridor between Belfast, Dublin and the South-East. In this area, there will be growing capital investment, employment and intensive land-use.

LOCAL

- Dublin, because of its vicinity to amenities such as the mountain and the sea, has a number of assets that other cities lack. It is recognised as 'a good place to live'. It is important that its natural environment, together with the culture and heritage linked to it, are preserved into the future.
- Updating and retrofitting the building stock in the city region will not only reduce its carbon footprint and thus its environmental performance, but can also create employment and economic benefits in line with the emerging 'green economy'.
- The introduction of congestion charges within the inner urban core of Dublin would be likely to reduce traffic congestion and improve overall mobility.
- Renewable energy generation, building retrofitting and Transport 21 are the three policies with the highest CO₂ abatement potential in the city region up to 2030. LED public lighting, residential lighting, and modified diesel/petrol cars offer the highest return on investment.
- There is a movement towards a form of 'new urbanism' which seeks to develop new neighbourhoods, towns and cities that are economically sound, environmentally responsible and supportive of community. Adamstown is one example of this trend.
- Water shortages are expected in the GDA in the next 20-30 years. As the population reaches two million, there will be a demand for an extra 300 million litres of water per day. Possible solutions include increased efficiency, reduced leakages, desalination of sea water, new ground-water sources and an alternative surface-water supply.
- 'Public gardening' and community allotments are proven to improve people's mental and physical health. They also help people to save on the cost of fresh vegetables, and can be a buffer for unemployed people in times of recession.
- Continuous public and private investments in R&D geared towards environmental solutions constitute the base of an important prospective sector for the Dublin region's economy in the future.
- The provision of green spaces in urban areas is increasingly important in improving people's quality of life. As the population increases, green spaces must be given their due priority.

DUBLIN TODAY

- * In 2006, 11.8% of accommodation in the Dublin region was detached. The region with the next lowest proportion of detached houses was the Mid-East, with 47.2%. Only 4.7% of Dublin city's accommodation consisted of detached houses, while it had the highest proportion of apartments, at 31%.
- * Dublin had the lowest rate of people driving cars to work (47.8%) compared with a national average of 57.1%. People in Dublin were far more likely to travel by bus (14.1%) or train (7.3%) over twice the national averages of 6% and 2.9%, respectively.
- * Over 98% of public water schemes in Dublin and the Mid-East complied with statutory requirements, compared with the state figure of 97.7%.
- * Dublin had four Blue Flag beaches and the Mid-East had three out of a national total of 83.
- * The highest percentage of households recycling waste was in the Dublin region (93.7%) compared with 85.7% in the Mid-East and 88.7% nationally.
- * Dún Laoghaire-Rathdown, at 31.8%, had the third highest percentage of household waste deposited at bringbanks and civic amenity sites well above the national average of 17.2%. In contrast, only 9.5% of waste in Dublin City and 13.2% in the Mid-East was deposited in this way.
- * The average peak hour speed in the Dublin region of 16.5 Km/h is amongst the lowest within the benchmarked cities, slightly faster than London and Bristol. Cologne and Helsinki are the cities with the highest peak hour speed, respectively 36 Km/h and 40Km.

GLOBAL

- Technology will be a major enabling force for business up to 2030, transforming supply chains, value nets, business models and work styles, and opening up new global markets for expansion.
- Discoveries in nanotechnology will lead to an unprecedented understanding of, and control over, the fundamental building blocks of all physical things. Developments in this field are likely to change the way almost everything is designed and made.
- Breakthroughs in material technology will generate widely available products that are smart, multi-functional, environmentally efficient, more durable and customisable.
- Products will get 'smarter' through embedded technology allowing unobtrusive devices and systems to monitor and react to operational actions, reducing the need for human intervention in 'routine' activities.
- Highly repetitive work, or work in difficult, extreme or unsafe environments, will increasingly be undertaken by robots and micro-robots, which will become smaller and smarter, and take on even more tasks.
- The field of synthetic biology will equip society with an array of applications that can scarcely be thought of today. Genetic modification will improve organisms so as to increase food production and quality, broaden the scale of bio-manufacturing and provide cures for certain genetic diseases.
- The next-generation internet will merge telephony, video and other communication media into a vibrant, interactive, adaptive and sensory medium that will shape and transform many industries as well as societies.
- Towards 2030, a new physical-digital landscape will emerge that links people, places and spaces to unprecedented amounts of information.
- Continuing controversy will rage around issues in biotechnology such as eugenics, cloning, gene patents, genetically modified organisms, the use of stem cells, animal rights, the privacy of genetic profiles, the danger of environmental havoc and an increased risk of engineered biological weapons.

NATIONAL

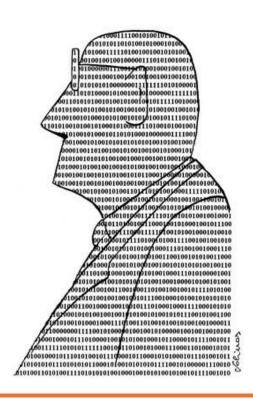
- Ireland has a good track record in ICT and biotechnology sectors. However, the past twenty years of prowess in building world-class software and producing pharmaceuticals is not enough to keep pace, let alone take a lead, in scientific and technological discovery and exploitation.
- Recent investments in science and technology are a welcome major step towards building an innovative and competitive economy. However, current and future Budget cuts due to the economic slowdown could threaten the future of R&D in Ireland.
- An investigation into the teaching of mathematics and sciences in schools is needed so as to identify the reasons for the weakness of Irish education in these fields. Performance in maths and the sciences needs to improve if the future of Ireland as a knowledge economy is not to be imperilled.
- Lack of awareness of the value of marine resources has made Ireland a late-starter in the development of a marine technology sector focused on sustainable harvesting, sensor development, wave energy, specialist food processing, intermodal maritime transport and biotechnologically-related aquaculture.
- There are huge technological opportunities in the construction industry in areas such as integrated building protection, off-site prefabrication, on-site mechanisation, smart buildings and materials, virtual design, and the application of IT in all aspects of construction.
- The ICT industry in Ireland needs to increase the value-added component in its products and services.
- There is a need to build enterprise capability to develop products and services by ensuring that national research and enterprise agendas are aligned. This should be facilitated by developing strategic technology platforms.
- Clean technologies are going to be a main force for the future. There is a need to explore and exploit new and renewable sources of energy, such as ocean-wave energy and hybrid energy, energy-storage systems, low energy transport systems and energy efficiency.

LOCAL

- Most of the renewable energy produced in the country up to 2030 will likely come from wind farms on the west coast. Solutions are urgently needed for the grid to be able to carry clean energy to the Dublin region, thus reducing its carbon footprint.
- Technology will continuously help to improve energy efficiency in every field of society. 'Negawatts' (electricity not created due to energy efficiency) are much cheaper than newly produced energy.
- The introduction of smart grids will integrate production and use of energy in the most efficient ways. Digital technology is helping us save energy, reduce its cost and increase its reliability. Smart grids are a necessary step forward in the development of the Dublin region.
- The availability of high-quality broadband is a key factor in competitiveness and innovation. Despite recent progress, Dublin is lagging behind competing cities in terms of broadband speed. Considering the trend towards cloud computing and the resulting opportunities for major companies in the region, broadband quality must be improved.
- Applying existing technologies to energy, buildings and lightings, and transport would allow a 28% reduction in carbon emissions in the Dublin region by 2025.
- Climate change at the global level is also driving technological change. The current CO₂-heavy transport system will need to be transformed or the Dublin region will have to pay high carbon taxes.
- As green technologies are one of the key drivers for the future, Dublin needs to develop expertise in their application. It also has the opportunity to become an R&D centre for these technologies.
- Trinity College and UCD are the only two Irish universities listed in the top 200 universities in the world. About 35% of people living in the city region have a third-level qualification. High education standards at all levels are essential for building a robust knowledge economy.
- Dublin can learn from best international practice in how technologies can be used innovatively in the city to increase quality of life and enhance social experience.

DUBLIN TODAY

- * In 2006, 63.8% of households in the Mid-East region and 60.7% in the Dublin region owned a personal computer. Ownership rates were in the range 52% to 55% in all other regions. In Dublin, 53% of households with a PC had broadband access to the Internet.
- * Dublin is one of the top three cities for mobile phone costs, IT fees and legal fees.



Key Uncertainties for the Future of the Dublin City Region

Central government support for Dublin. For many years Dublin has not been recognised by the national government as the main engine of growth for the Irish economy. This has resulted in under-investment and a lack of strategic vision for the city region. In recent years there have been signs of a growing recognition of Dublin's key role in the Irish economy. However, it remains to be seen whether or not government policies, especially those related to the reform of local government and infrastructural investment decisions, will address this vital issue. The lack of crucial decisions and prolonged delays in implementation can significantly impede Dublin's ability to compete on the international scene.

Providing efficient infrastructure. Unprecedented levels of growth over the past decade have put enormous pressures on infrastructure and facilities, especially transport. The Dublin region urgently requires a modern and integrated public transport system to ensure speedy and comfortable movement around the city area. Efficient public transport, together with a modern ICT infrastructure, is seen as critical to the growth of the knowledge economy. However, since high levels of investment are required to build such infrastructure, the current economic crisis may significantly delay or stop its development.

Maintaining social stability and closing the gap between rich and poor. Social stability and inclusion are critical to the well-being and prosperity of societies. Efforts towards closing the gap between rich and poor, tackling crime and anti-social behaviour, addressing drug dependency, fostering the integration of immigrants and raising education levels need to be sustained, especially in times of economic downturn, when social problems tend to intensify. Failure to do this is likely to result in major social unrest and could contribute significantly to the loss of competitiveness.

Educating, attracting and retaining highly talented and skilled people. In the knowledge economy, human capital is the key to creating a successful economy. Global cities will be competing increasingly for highly skilled and talented people. Dublin's ability to attract and retain these people will have a strong impact on its economic performance. Issues such as quality of life, good transport infrastructure, an excellent education system, attractive natural and cultural environments, and a stable tax system will be important for attracting and retaining such people.

Reforming the governance structures. The current governance arrangements in the Dublin city region are highly fragmented. Although the local authorities have collaborated more in recent years, a coherent regional structure – responsible for the strategic development of the region and the general implementation of strategic policy – is still lacking. How and when the governance structures will be reformed will have a critical impact on the performance of the region.

Key Uncertainties for the Future of the Dublin City Region

Economic development. The ways in which the current economic crisis is being addressed – such as the selection of spending cuts, investment levels and prioritisation, and changes in taxation – will have a strong impact on the future of Dublin and the whole country over the next decade or so. Considerable cuts in spending on education, public transport infrastructure and sustainability measures pose threats to economic recovery. However, the current situation also creates opportunities for radical change in areas such as land taxation, spatial development patterns, and a move towards a greener economy.

Access to resources. Security of energy supplies, water resources, food supplies and availability of land for different uses will gain even more importance over time. For example, since the Dublin region faces water shortages in the near future, changes in water management, usage behaviour and distribution are required without delay. Also, the dependency on imported fossil fuels needs to be addressed; otherwise, rising prices combined with high car dependence and security issues are likely to stifle economic growth.

The effects of climate change. The issue of climate change needs to be addressed in two main ways. First, efforts are required to reduce greenhouse gas emissions, since failure to do so will result in high economic costs. Secondly, adaptation measures need to be explored and implemented. Otherwise, the effects of adverse weather conditions, environmental disasters (such as flooding) and the social consequences will place huge burdens on the economy.

Scenario Logics Globalisation Establishing scenario logics helps to translate the driving forces of **European Cohesion** change, issues and trends into themes that form the organising principles around which the Irish Stability scenario stories are structured. The logics connect the present to People and Quality of life a specific image of the future, as any 'history' of tomorrow must make sense today. Governance The logics were identified from **Economic Development** the insights generated through the workshop and strategic conversations. They Resources and Natural Environment presented in Figure 2 on the right. Spatial Patterns and Built Environment Learning, Creativity and Innovation Figure 2: The scenario logics

Feet of Clay Scenario 1

The World

This scenario is based on expanding globalisation and growing libertarianism. It is a world of relatively steady economic growth and the further opening-up of markets, underpinned by rapid technological advances. Innovation, creativity and resource productivity are the name of the game.

Relatively quick recovery after the global recession that struck in 2008 has re-established confidence in free-market policies, corporate restructuring and enlightened entrepreneurship. The role of national governments has been diminishing, while the power of international corporations and city governments has been strengthening. International collaboration is largely aimed at facilitating global competition and enhancing market efficiency. In this highly globalised world, transparency is high and good access and availability of information help new actors to enter the markets. Although cooperation triumphs over conflict, alliances are usually formed on an *ad hoc* basis in order to grasp opportunities of the moment or to solve social and environmental problems in the most prompt and pragmatic way possible.

The world of 2030 is very much a world of winners and losers, although they exchange places rather often. The gap between rich and poor has widened even more, as individualistic and materialistic values prevail. Since most of the serious environmental problems have predominantly been addressed by free-market mechanisms, change is slow and environmental impacts, especially these caused by climate change, are the source of more and more devastation around the world.

The years approaching 2030 were increasingly marked by social unrest, growing numbers of environmental refugees and further intensification of the competition for resources. Yet it is also a time of exciting technological developments, especially in the area of biosciences, the launch of Worldwide Web 3.0 and the first human travel to Mars.

Europe

Europe in 2030 is an important player on the global stage. The continuous investment in the development of knowledge industries, which helped Europe to become a leader in the core areas of ICT technologies, energy, air transport, pharmaceuticals and financial services, combined with transformation of its social policies and reorganisation of its institutions, contributed to the steady economic growth of the region.

In the late 2010s, the coming to power of a new liberal, pan-European political party ('Liberty') radically changed the direction of the European project. The EU returned to being primarily an economic entity, facilitating freedom of movement of people, goods, services, capital and knowledge. It moved away from having a regulatory role in all areas of the lives of Europeans, abandoning to a large extent its strong social and environmental values.

The EU has expanded eastward, bringing in Ukraine in 2019 and Turkey in 2021. These expansions brought a wealth of new opportunities. Both countries provided a large and well-educated but low-cost workforce, and served as stepping-stones to larger markets in the East. In 2030, Turkey is one of the fastest-growing economies in the world and has a dynamic young population, which provides a cushion to the pension crisis across 'old Europe'.

Like other parts of the world, European societies are fragmented; individualism and relativism are dominant, and consumerism is seen as a key to economic success. Europeans now tend to limit their solidarity to their immediate entourage, particularly their family. They have little trust left in collective actions, especially those undertaken by governments and the public service.

Ireland

Ireland in 2030 is a strong player on the global stage, specialising in highly advanced fields of science and technology. It is also one of the richest countries in the world, with two of the wealthiest cities in Europe located on the east coast. The election of the Progressive Liberal Party into office in 2012 resulted in draconian reforms of the public sector, privatisation, support for market forces and sustained high levels of investment in scientific and technological development. These measures helped to lead Ireland out of the recession of the late 2000s and early 2010s.

The Ireland of 2030 is a country of contrasts at all levels. The eastern seaboard is home to quasiautonomous city regions led by elected mayors and specialising in medical research, nanotechnology and creative information technologies, while the western regions are dominated by a commercialised heritage and culture industry and strict environmental-protection regulations. Extreme inequality divides the cities, where the very rich, living in gated communities, are often neighbours of the poorest communities. Individualistic and materialistic attitudes prevail over community life and civic spirit, which have mainly been replaced by a focus on family life and the fulfilment of individual needs.

The Dublin City Region

In 2030, the Dublin city region, with its 2.5 million people, is the key part of a large polycentric urban area, the Eastern Conurbation, which stretches from Belfast and Armagh all the way to Waterford. With a population of 5.2 million people (70% of the island's population), the conurbation is the economic engine of the island. The region is densely intertwined with intensive modern agriculture (primarily based on hydroponic culture and GM foods), services, and large-scale infrastructure, such as IT, bio- and nano-technology.

The Eastern Conurbation

The Eastern Conurbation developed as market forces coupled with demographics led to the establishment of the critical mass necessary for an urban agglomeration of sufficient scale to be able to compete as a European city region. Its northern and southern fringes are connected by a railway and a high-speed motorway. The dense network of commuter and fast rail lines complemented by roads connects most of the centres in the region. In 2017, Dublin's airport was relocated to the west of the GDA. West Dublin Airport now serves as a primary gateway to the country. In 2027, the building of the land link to the UK began and it is predicted that by 2034 a fast rail connection will run between Dublin and London.

In 2014, the Progressive Liberal Party completely restructured local governance systems, placing cities at the centre. The principal unit of political power is now the city region, and the most powerful political figures are their directly elected mayors. The new 'city states' compete not only internationally but also with each other for investment and skilled labour, and increasingly for resources such as water and energy. As this internal competition intensified, a meeting in 2026 of the seven mayors, representing all major centres of the conurbation, decided to form a regional alliance to help to develop mini-regions based on specialisations that in turn would help to alleviate rising pressures caused by internal competition.

Feet of Clay Scenario 1

Spatial development

The Dublin region's spatial composition is like an abstract patchwork: the old mixed with the new, gated communities next to ghettos, urban wastelands fringed by modern public transport infrastructure, high-tech parks, 'corp-towns' (high-quality towns built on the city fringes, with direct access to public transport and excellent facilities, and inhabited by highly skilled knowledge workers, higher-tier managers and professionals), 'cloud-centres' (cloud computing centres), wind farms and scarce green amenities. Lack of proper planning controls and of coherent spatial vision left urban development to the devices of the free market. Although, in some areas, these mechanisms worked well (e.g. private-public partnerships created to revitalise large areas of Finglas), in others they were disastrous (e.g. new developments in the Dublin Mountains). Over the years, densities in the city have been increased significantly to fit the public transport network. However, the quality of accommodation in most areas of high density is questionable.

Dublin city centre changed with the rest of the city. The decade of the 2010s witnessed its spiral decline: falling numbers of families, the middle class moving out, rising crime, and falling property values. In 2021, 40% of people living in the city centre were of non-Irish descent and some of the central areas had the highest unemployment rates (up to 30%) in the whole region. Various attempts to maintain the attractiveness of city-centre shopping, such as the presence of high security, were ineffective; most shoppers with deep pockets moved to trendy shopping villages in the 'corp-towns'. Although the city centre was largely ignored by rich and 'important' people, ethnic fairs and festivals and a strong community spirit created an unsafe but colourful and vibrant environment enjoyed by many. However, in 2030 things are about to change. Mayor Cosgrove, elected in 2028 on the foot of a promise to give Dublin back its city centre, has introduced measures to tackle crime and increase the standard of accommodation, and promises further improvements in the future.

Economic development and entrepreneurship

In 2030, the Dublin city region is economically thriving. Its ability to produce and attract human capital of the highest level, thanks to a flexible regulatory environment and a 'can do' attitude, is recognised as a main factor underlying its success. The marriage of a software cluster with a financial-services knowledge hub in the IFSC led to the establishment of a global centre for developing tax software in City West. In 2025, the sector produced 20% of the city's GDP. The strong collaboration between industry and third-level institutions, conducted formally under the Creative Alliance umbrella since 2012, made Dublin a leader in the development of bio- and nano technologies. The emergence of 'corporate breeding fields' – private universities set up by global corporations – is the latest trend. The city region fringes are also areas of intense economic activity in agriculture. A doubling of the UK population to 120 million opened up a whole new market, and food is a primary export product from the Dublin region.

Entrepreneurship is a trademark of the city. Every year thousands of new companies are set up, and many succeed both on the national and international scene. For example, the leading businessman Patrick Litewka set up a cloud-computing company that, after just three years in operation, has been valued at €2 billion and is perceived to be a world leader in developing innovative IT security solutions.

On the flipside, Dublin is home to equally entrepreneurial criminals. It is estimated that criminal activity in the Dublin region equates to 40% of the city's GDP. As well as the old reliables, such as drug and people trafficking, the crime lords specialise in digital theft and the servicing of blackmarket transactions in human organs and other prohibited goods.

A major hacker centre was operating in Clondalkin, using a team of 167 international hackers daily breaking hundreds of bank security codes and acting under the auspices of an internet trading company. The shutting-down of this centre was a major success, but the operation was only the tip of an iceberg.

Natural environment and resources

While economically Dublin thrives, environmental pressures are becoming a serious concern. Severe droughts in the early 2020s put even more strain on the already stretched water resources, causing breaks in the water supply in the city and severe disruptions in hydroponic food production. In 2023, millions of euros and the trust of consumers were lost when, in an attempt to save a large hydroponic tomato plantation in Hollystown, the use of recycled water led to contamination in plants and allergic reactions in many people. Many smaller cases of a similar nature have been recorded in recent years. As sea levels rise and freaky weather becomes more frequent, the erosion of the coast continues. The use of Sandymount beach has been severely restricted since 2023 and, in the summer of 2027, Malahide harbour and North Bull Island were claimed by the sea. Houses built on the flood plains in the early 2000s are uninsurable. People have finally become aware of the serious effects of climate change.

The discovery of gas fields in Mayo helped with the transition of the energy system. In 2030, 35% of Dublin energy comes from renewable sources, 40% from nuclear and another 25% from fossil fuels. Energy security has been high on the agenda of regional government as it is seen to be critical in fostering a healthy economy.

Health, education and society

The provision of services in the city region is patchy. Those who can afford it enjoy a high standard of private healthcare and educational facilities, while the rest of society depends on public provision. It is an unwritten rule that public spending levels should reflect the levels of taxes raised in individual districts. Consequently, the more affluent the area, the better the public healthcare and education provision. In effect, the poorest areas get only scraps from the top table. The outbreak of a vicious strain of malaria in 2024 in Baldoyle led to the deaths of almost 15,000 people, of whom 70% were Asian and African immigrants. If the outbreak had been dealt with urgently, most of these lives could have been saved. The event provoked a public outcry and Dublin's mayor resigned as a result. However, there is no sign that poorer people will be provided with adequate healthcare in the long term.

Dublin of 2030, in so far as it was a symbol of 'Irishness', has lost its identity. Tourists, still attracted by Irish landscapes and heritage, rarely visit the city, unless looking for special thrills in the 'entertainment districts'. Most residents find it hard to cope with the stresses of their daily lives. Hence, suicide rates are higher and average life expectancy lower than in the rest of the country. Riots and other forms of social unrest have intensified in recent years, and new social movements, often closely linked to religious groups, are starting to emerge. Something sinister is brewing beneath the surface.

Winds of change Scenario 2

The World

It is a changed world in 2030. There is a general perception that a balance between civic society, business corporations and governments has been achieved. There is a definite trend towards a more peaceful, equitable and environmentally stable world. The prolonged global recession that emerged twenty years earlier brought about a wide consensus that uncontrolled exploitation of the natural environment coupled with exponential growth models was not sustainable. New rules and limits to growth had to be introduced to avert systemic collapse.

The post-Kyoto agreement signed at the end of 2009, together with the introduction of widespread financial and economic policies constituting a 'Green New Deal', were the first outcomes of global agreement on the need for a completely new set of rules. A form of natural capitalism gradually replaced the Chicago School of Economics' unfettered free-market version of capitalism, which was later identified as one of the biggest contributors to the crisis. Forms of governance have generally been broadened, thanks to greater access to information and the increasing involvement in decision-making of grassroots movements at the local, national and global level.

Technological innovations, primarily in the clean-tech area, as well as advances in biotech and nanotech, mean that human impacts on natural systems have become more and more neutral. These developments are perceived as the 'green sprouts' of a restorative society — one that gives back to nature more than it takes. Despite the wide disparities that still exist between the world's rich and poor, the gap appears to have narrowed over the past decade, thereby pointing towards a more just and equitable human society in the future. Quality of life has improved globally, with less emphasis on consumerism in favour of stronger community bonds and greater social interaction.

Europe

Europe in 2030 has reached maturity. The enlargement process has continued and the European Union, with 36 member states, is now an effective federal government. Subsidiary power remains in the hands of nation states, while the EU acts as the overarching authority in most realms of society and the economy. European citizenship has become a reality, and is reinforced by emerging common values shared by people across constituent countries. Concepts such as sustainable development, corporate responsibility and active citizenship have gradually crept into all policy agendas within the EU.

European leadership is now recognised worldwide for achieving broad international cooperation in areas such as transnational trade and sustainable development. Over the past decade, huge investments in R&D, aimed at tackling climate change and promoting a clean-tech revolution, fostered the emergence of innovation hubs and spin-off businesses in most member countries. The knowledge economy thus created is highly competitive, and European technology, products and services are enviously observed by the rest of the world. However, in the last decade, competition from countries such as China, India and Brazil has intensified, even in high-value markets where the EU has long held a time advantage. Imagination and energy are needed if Europe wants to maintain its position in the world economy.

Ireland

Ireland is now in a stable economic condition, compared to the disastrous post-Celtic Tiger slowdown from 2008 to 2013, which is still remembered as the period of Celtic Sloth because of high unemployment and serious social discontent.

Politically, the Irish interpretation of the 'Green New Deal' showed complete discontinuity with the past. Fianna Fáil, which held power during the 2000s, was blamed for the slowdown and lost power in 2011 in favour of a coalition between the Green and Labour parties. The Shared Vision party, created in 2017, came to power in 2023 with an attempt to introduce many principles of the now widespread model of what was once known as Swedish social democracy.

The concept of solidarity has moved to the top of the political agenda due to a growing recognition that the creed of individualism, which prevailed until the mid 2010s, had sapped the country's civic soul. Big investments in fostering social inclusion reduced the widening poverty gap and helped to increase the involvement of a large number of citizens previously disengaged from community life. People generally enjoy a good quality of life. Higher taxes are counterbalanced by the provision of low-cost healthcare, free education and government-subsidised services. The greater degree of public policy intervention in many aspects of society is largely accepted by citizens as a good trade-off for greater economic stability and social order.

A better regional balance has finally been achieved in 2030 as a consequence of the new National Spatial Strategy of 2014 and the National Development Plan of 2015. A Western Corridor, made up of three cities (Cork, Limerick and Galway) and their hinterlands, counterbalances the Eastern Corridor, consisting of two metropolitan regions (Dublin and Belfast) and a number of smaller cities. The West is a classic example of the modern knowledge economy based on culture, marine administration, education, high-tech medical and bio-pharma industries. In the East, more continuous large-scale infrastructures support intensive agriculture, agri-business, nano-tech industries, and consultancy and financial services in the carbon-trading market.

Sustainable development is not a mere buzzword but has become embedded in policy across all sectors. Reconciliation of growth and sustainability lies at the heart of the country's success. Environmental ideologies have been translated over the past 15 years into practical actions. Ireland of 2030 is now truly green. .

The Dublin City Region

By 2030 the Dublin city region, together with Belfast and a number of larger towns and smaller cities between them, has become one of the two metropolitan regions in the Eastern Corridor. It accommodates 2.5 million people, equal to almost 50% of the country's population of 5.13 million. A range of large-scale infrastructures, developed over the past twenty years and mainly interlinked by electrified public transport, efficiently connect all the urban settlements.

New governance structures

Since 2015, following the implementation of local government reform, Dublin has been governed by a directly elected mayor. The trend towards the decentralisation of power, promoted at EU level and continuing for many years, has reached its peak with the establishment of the Dublin Metropolitan Region, the governance structure under which the four existing local authorities were merged. Since the reform, there has been a clear division of powers between national, regional and local government whereby high efficiency drives the three layers of governance.

The fourth mayor of the Dublin Metropolitan Region was elected in 2028. She appears to face greater challenges than her predecessors. Dublin's position both nationally and internationally has been declining. At the national level, the improved quality of life in the West has been attracting more and more well-educated young people. Internationally, the region is weakened by its relative small scale compared to the megacities that have mushroomed all over the world over the past two decades. The critical mass of bigger cities is more attractive to international investors, workers and visitors alike.

Winds of change Scenario 2

Quality of life

People now enjoy a good quality of life in line with other major world capitals. The memories of the big depression which ended only fifteen years earlier are still vivid in people's minds. Unemployment started to rise rapidly in 2009 and peaked at 500,000 nationally two years later. A new social partnership was created and the policy 'work less, work all' was introduced as a measure to reduce the number of unemployed. In 2030, normal working hours in the region are no more than six per day, which provides people with more spare time to use according to their needs and desires.

In comparison to the first decade of the 21st century, people are less wealthy and the proportion of their wages that was previously available for superfluous consumption has fallen dramatically. However, the greater availability of time is increasingly being regarded as something that money cannot buy. Many people now consider volunteer work and community involvement as part of their civic duties. Both are so widespread that they add up to 20% of the economic value created in the region. Community gardening and public allotments are other examples of common activities in which many people engage in their spare time. The direct production of fresh fruit and vegetables contributes to savings as well as to improved physical and mental health.

Society

The old pension schemes collapsed at the peak of the economic crisis in 2011. The crash started in the private sector, and was followed directly by a crash in the public sector. A popular uprising forced private and public pension funds to reintroduce social security by setting up a new system with fewer benefits for people with higher wages and more focus on protecting more vulnerable people.

A positive trend is the reduction in anti-social behaviour caused by alcohol and drug consumption. The numerous policies promoted by the regional authority and aimed at social inclusion are starting to yield the first positive results. This trend is reinforced by the increasing number of pubs closing down. The Irish people's close and historic relationship with alcohol seems to be in decline due to an increased awareness of its negative effects on health as well as to a much more rigorous enforcement of the anti-drink-driving laws. Dublin is no longer the noisy 'party city' it used to be in the late 2000s. At the same time, there is an upsurge of small spiritual holistic movements based on healthier lifestyles all over the region; vegetarianism, yoga and meditation are now common.

Sustainability

The introduction of carbon taxes, under the 'polluters pay' rule, has changed the lives of most citizens – affecting where they live, what they eat, how they move around and how they spend their spare time. All new buildings since 2016 have been carbon-neutral in both construction and the whole life-cycle. Existing buildings have been retrofitted to meet the minimum allowed energy ratings. However, where the energy efficiency of older buildings meets only the lower ratings, owners and tenants are liable to pay an amount to offset the higher emissions. For food in restaurants and supermarkets, the amount of CO_2 emitted during its production and transportation is quoted, and prices include a variable amount to offset the related carbon footprint. The same principle applies to all consumer goods.

Between 2008 and 2010, the Framework for Strategic Sustainable Development was piloted by Dublin City Council as a whole-system approach to sustainability. Following its successful outcomes, in 2015 it was decided to place it at the core of the strategic planning and action-plan implementation of the Dublin city region. It now integrates a wide range of policies, including those on energy, spatial development, housing, waste management, transport, biodiversity and social inclusion. Consequently, regeneration is now at the top of the economic, social and environmental agendas.

One of the most successful measures since the introduction of the Framework for Strategic Sustainable Development is the creation, in 2018, of an urban growth limit. The urban area is bordered by a large green belt in order to restrict the sprawling pattern of the city and to increase the densities of urban settlements. Although Dublin city centre has managed to maintain its low-rise and Georgian character, the landscape at the periphery is now strewn with skyscrapers covered by green vegetation aimed at enhancing biodiversity and reducing their carbon footprint. As well, since warmer weather brought about by climate change improves growth and productivity, food is now grown by households on balconies, windowsills and roof terraces.

Transport and energy

The establishment of the Dublin Transport Authority in 2015 sped up improvements in the public transport network. Mobility is primarily electrified public mass transport. Integrated ticketing allows citizens to avail of the efficient network of services provided by Metro North and Metro West, the four Luas light-rail lines, suburban rail and hybrid-electric buses. Private transport in the region primarily consists of bicycles, hybrid-electric cars and electric motorbikes. It is no longer cost-effective to own a fossil-fuel-powered vehicle.

The introduction of a smart electric grid in the region is another achievement made possible by the framework. All buildings now incorporate a device to monitor the energy used by all electric appliances. According to the varying price of energy, the central device decides, for example, when to activate heavy-consuming appliances such as washing-machines and dishwashers. Most buildings are now net producers of energy thanks to wind or solar microgeneration. The energy not used can be sold to the grid, and households often gain on the price differences between day and night by selling energy produced during the day peak-hours and buying it back at a cheaper price during the night. Smart device and micro-generation technology are often subsidised by the energy utilities which retain a small percentage of the net gain.

Natural environment and resources

People's concern about the condition of natural resources in the region has dramatically increased during the past decade. As awareness of the damaging effects of ever-increasing human encroachment on the natural environment grew, more and more policies were directed to protect and improve the remaining resources. In 2014, Dublin experienced the first water shortage in its history. This prompted major investment in three large desalinisation plants in Dublin Bay. Food security also received special attention from the regional authority as soon as prices reflected the newly introduced carbon taxes. Most of the food consumed in the country was brought from overseas; the region thus began to promote organic 'intensive' agriculture, which became one of the most profitable businesses outside the green belt.

Winds of change Scenario 2

Economic development, education and R&D

Since the widespread introduction of carbon taxes, Dublin has been able to retain its niche role in the global financial market by specialising in carbon trading operations. Most companies in the IFCS now provide a full range of consultancy and financial services to a multitude of Irish and European manufacturing companies that are subject to the 'cap and trade' system of emission allocation. The third-level education institutions in the region are well equipped to provide the financial services industry with graduates who have the necessary skills and new ideas.

Thanks to strong investment in education over the past fifteen years, the main four third-level institutions – TCD, DCU, UCD and DIT – are listed among the top 150 universities in the world. Education is free of charge and of excellent quality. The four universities thus attract many students from Europe and around the world. A number of research centres not attached to the four universities specialise in such fields as the cloning of human organs and nano-technology. Despite some strong initial opposition to the cloning of human organs, they are producing very innovative solutions and are collaborating strongly with Irish industry.

The region is also competing successfully internationally in attracting highly educated people and postdoctoral researchers to work in the regional innovation hubs. The region is leading internationally in nanotechnology, and an increasing number of applications are being patented for the healthcare and clean-tech sectors.

Entrepreneurship is a characteristic trait of the Dublin region. After the recession of the late 2000s, targeted investments were aimed at enticing people to extend and exploit their talents, and encouraged them to become more self-sufficient. The end of the recession apparently helped to raise young people's confidence. In the past ten years, an increasing number of small businesses run by young entrepreneurs have been set up. They specialise in green design, green product development, green marketing and, in general, in the full range of services in the now booming market for economic, social and ecological regeneration.

People's Values

It is clear that there has been a change in the values of people living in the region. During the long recession, people's concerns went back to achieving economic and physical security, but in recent years the emphasis has moved to the more subjective aspirations of well-being, self-expression and quality of life. The higher priority given to environmental stewardship, more tolerance of diversity, and greater entrepreneurship are clear examples of a movement towards self-expression and post-materialistic values.

Building on the region's experience in welcoming foreign students and workers, since 2025 a series of public and private organisations have been partnering with the African Union in projects aimed at twinning civic, business and political organisations. Many Africans who have distinguished themselves through academic, political and business achievements have been welcomed to Dublin to share experiences and help the region to gain competitive and cultural advantage. The project seems to be yielding good results. Its ultimate aims are to export Irish technology and expertise across the African continent and forge an ever-closer partnership.

Overall, in 2030, the Dublin city region is doing well. Yet, it faces new challenges as competition from the Western Corridor intensifies while its own energy and innovation linger.

The World

The world has been shaped by a socio-political backlash against the forces of change prevailing in the early 2000s. The near collapse of the global financial system in 2008/2009, and the long economic stagnation that followed, combined with an inability to reach consensus among nations on global issues such as climate change and global market regulation, have led to an intense questioning of globalisation and its consequences. In 2030, patriotic movements are increasingly active in the political domain and a strong desire to preserve personal independence within a distinctive national identity is widespread. People greatly appreciate their individual freedom, while at the same time they have high regard for state security and their own cultural identities.

Nation states prevail in this increasingly fragmented world, while the role of regional alliances, such as the EU, has weakened. Disillusionment deepens, as hope in the ability of technological advances to solve the world's environmental and social problems withers. The importance of sustainable development is widely acknowledged but, as many nations struggle with economic problems, the environment is not their top priority. Some local environmental improvements in the areas of air, water, waste and energy were made in the 2010s, mostly by countries with high environmental pressures. Nevertheless, climate-change problems largely remain unabated and the effects of global warming are now starting to hit hard.

Constrained economic globalisation continues, with growing international investments. However, most countries try to retain relative independence from what is happening in international markets. International cooperation is now limited to the traditional domains of defence, trade and immigration. Social and environmental pressures are mounting around the globe, intensified by the liberalisation of markets; rapid, though often poorly planned, urbanisation; rising crime levels, and increasing conflicts around scarce resources.

Europe

Europe in 2030 is shaped by long periods of economic instability, technological development and international competition. Europeans have a rather fearful view of the world beyond their borders and are anxious about their prospects for the future. Their dreams about the benefits of economic globalisation have been shattered as monetary instability increases, growth stagnates, long-term unemployment grows and the gap between rich and poor widens.

Over the past twenty years, the role of nation states strengthened at the cost of the common European project. As joint efforts to revive the European economy after the prolonged 'European Winter' (2009-2014) proved unsuccessful, countries looked for measures that would give them greater independence from European economic policy. In 2011 and 2012 Ireland, Slovakia and Greece, standing on the verge of bankruptcy, had to be rescued by the EU and the IMF, while in 2015 Italy left the euro zone altogether, causing a major financial shock throughout the region. In 2030, although the EU is still recognised as a political and economic entity, collaboration between nations is primarily based on separate treaties and bilateral agreements.

Safety and security are the key concern across all aspects of life. The European Security Council was forced to deploy troops on a number of occasions to restore order in parts of France, Spain, the UK and Poland in the last decade. The EU territories are often the subject of terrorist attacks, mainly from Islamic fundamentalist groups, often home-grown.

In 2030, although the outlook for Europe as a whole is unsettling, positive changes are occurring in different countries. The rise of civic values, less materialistic attitudes and the strengthening of individual identity, together with greater pride in national culture, are observed in most countries. Individuals feel responsible for their communities and work together to solve their local problems, often in creative and imaginative ways.

The Lost Decade Scenario 3

Ireland

In 2030, Ireland is in transition between a failing, open, modern and globally connected economy and a renewed, patriotic, localised and introspective nation state, seeking a modest yet comfortable future. The decade of the 2010s saw a wiping-out of most of the Celtic Tiger gains. This seriously put in question the economic and social policies pursued during this period. Feeling the negative impacts of being an open global economy created a lot of resistance to such a model. Throughout the 2010s, clashes between believers in further economic globalisation and those who opposed it created periods of prolonged political instability. Ultimately, the formation of the Ireland First party in 2021, promoting ideals of patriotism, protection, political autonomy and social solidarity, followed by its landslide victory in the 2024 elections, brought political stability so that attention could finally be directed towards addressing economic and social problems.

In 2030, Irish people value personal freedom, but within the context of a closed and independent Ireland. They are proud to be Irish and cherish the nation's culture and heritage, as well as, increasingly, the natural environment. Although crime, corruption, racism and poverty are still serious problems, greater personal responsibility and strengthening community spirit are slowly transforming Irish society.

Business is focused mainly on domestic markets, the UK and, to a lesser extent, the rest of Europe. Virtual reality and the entertainment industry, data-management centres, small-scale manufacturing, arts and crafts, slow food, organic farming, heritage tourism and other niche services are the main basis of Ireland's frugal economy.

The Dublin City Region

The Dublin region in 2030, with a population of two million, is still the economic engine of Ireland, although it has a low international ranking. In the Worldwide Quality of Living Survey in 2025, Dublin was characterised by unabated urban sprawl, poor public transport, crime, racism and social exclusion. It was ranked in 114th position. However, after almost two decades of sliding down the ratings, its situation is finally improving. In the latest survey, the city was placed 88th.

Drifting city

The prolonged recession and political turmoil of the 2010s put a once-thriving urban region nearly on its knees. Lack of money for improvements in infrastructure (especially in public transport and ICT), increasing taxes, diminishing investment in education and R&D, and constant revisions and delays in local and regional government reform, left Dublin with limited tools for shaping its future. Many international giants, such as HP, Intel and Microsoft, having had difficulties finding highly skilled labour and fed up with inadequate infrastructure, moved elsewhere, leaving behind a vacuum.

Transformation of society

The changes that swept through Dublin and Ireland over the past 20 years have transformed civic society. The decade of the 2010s saw further rises in crime and drug abuse, and intensification of racial tensions. Two types of ghettos developed: the 'home-grown' ghettos such as Tallaght and Drimnagh, where long-term unemployment, crime and drug abuse prevailed; and the 'blow-in' ghettos such as Smithfield and Balbriggan, where poor people of non-Irish descent live. Both types of ghettos are lawless and dangerous areas for outsiders. People who could afford it moved away from such dangerous zones to the outskirts, further fuelling urban sprawl.

A strong rise in racism in the 2010s was a new trend for Ireland and Dublin. Worsening social exclusion, high unemployment and the emergence of right-wing groups blaming immigrants for stealing jobs from Irish people fuelled the rise of racial tensions. Dublin, a once tolerant city, became the scene of numerous attacks on non-Irish communities. In response, some of the more proactive immigrant groups organised themselves to protect their people. On two major occasions in 2014 and 2016, the Irish army had to be called in to deal with racial riots, which lasted for days. A strict Irish immigration policy meant a sharp decrease in the influx of immigrants to Ireland and Dublin.

While the 2010s were marked by tensions and social fragmentation, in the 2020s a new society began to emerge. Many people – tired of living in constant uncertainty, struggling with poor infrastructure and coping with the effects of incompetent decisions – decided to take matters into their own hands. 'Work together for a better Ireland' was the underlying message of these new citizen movements. The Ireland First party was formed in Dublin by a large group of active citizens collaborating through the web. The Dublin region developed a 'second life' type of portal that helps people to exchange ideas, goods and services, as well as form *ad hoc* alliances to address all sorts of issues, from childcare co-ops to neighbourhood cleaning, car-pooling and civic policing. A new set of values embracing personal responsibility, solidarity and equality, and moving away from materialism and indifference, is emerging. Although the most serious problems persist, hope for the future glimmers.

Economic development

In 2030, the Dublin region's economy is relatively stable. Creative and entertainment industries, 3D simulation and gaming, data-management and information-processing centres, heritage tourism, small-scale manufacturing and services generate modest yet comfortable income levels. The creative and entertainment industries were the only sector that grew continuously, with thousands of small firms working for major web-based entertainment companies. These 'creative clusters' are usually located in the edge-towns or small suburban villages, although most of their employees work from home or local 'hives'. A major boost to the heritage tourism industry in the region was the opening of the Ancient Living Centre in Bray in 2023. The centre offers a high-quality, real-life or virtual experience. It attracts people from all over the world, often with Irish origins, who not only wish to study the language and history of Ireland, but also want to experience the life of their ancestors and learn forgotten crafts. It is estimated that, in 2029, 18% of Dublin's GDP was generated by the heritage industry.

Spatial patterns

While the economic situation deteriorated from the late 2000s to the mid-2010s, lack of investment in public transport and weak land-use planning policies, combined with people's preferences for suburban or rural living, led to further urban sprawl. As congestion worsened, people and businesses moved further out, creating 'edge-city' employment and industry nodes along the main transport corridors. The biggest 'edge settlements' developed along the transport corridors, such as the N7, N4, N2 and N81. These highly unsustainable patterns supported a car-dominant mindset, reinforced by Ireland's poor rail network. High oil prices and low incomes have significantly reduced the mobility of many social groups, in particular, the elderly and people on the minimum wage. Also, the costs of carbon emissions weigh more heavily every year on the city's coffers.

Significantly less development took place in coastal areas due to the risks of flooding and sea erosion. In 2027, large areas of Malahide, including sections of the railway line, were claimed by the sea. Flooding and other disruptions caused by weather events have increased in recent years.

The Lost Decade Scenario 3

Repairs of infrastructure, loss of revenue due to disruptions and related health risks are yet another burden for the Dublin and other regions, although the solidarity of people in these situations is encouraging.

Dublin's city centre has not changed much over the past 20 years. Its Georgian character was preserved as little new development took place. Although it is neither the safest place nor very well-maintained, it is still perceived as the heart of the city region.

Governance system

After a long wait, the local and regional governance system was reformed in 2018. In 2030, the Dublin region is governed by the Dublin Metropolitan Authority, which has power to raise local taxes and is responsible for strategic planning and the provision of education, health facilities and other city services. Over the past ten years the central government, burdened by high national debts, has been transferring more and more responsibilities to regional levels without, however, matching regional subsidies. Dublin's funding base is modest, and savings and innovative solutions are applied across the board.

Education

The reorganisation of the universities sector in 2013 saw the privatisation of Trinity College Dublin and the merger of all institutes of technology in the region, including Carlow IT, under the auspices of DIT, with its headquarters in the new Grangegorman campus. A review of programmes to exclude duplication and promote innovative ways of course delivery and the use of e-learning led to considerable savings, while maintaining relatively good third-level education, open to all. Government investment in R&D is low, while a growing influx of private funding into virtual reality, simulation and content management and information processing has been observed in recent years. One of the most popular internet TV channels is streamed from Dun Laoghaire, while three out of five top global companies creating on-line 3D simulations for the education sector are located in the Dublin region.

Natural environment and resources

Over the past two decades, sustainable behaviours have primarily been induced by the high prices of resources and the cost of energy. The first attempt to introduce water charges, in 2011, was strenuously opposed. In response, to save water, the four local authorities in the region ran a somewhat controversial campaign, 'An hour without water', whereby taps in domestic buildings were dry for an hour every day for six months. Finally, the water charges introduced in 2013 triggered behavioural changes, which resulted in a 15% reduction in water usage within two years.

Renewable energy accounts for about 55% of power needs in the Dublin region, and the rest of Ireland, in 2030. The Spirit of Ireland project, which surfaced for the first time in 2008, proposed the conversion of wind energy into hydro and was finally implemented eight years later. Steep increases in energy prices and growing insecurity around the supply of fossil fuels and gas triggered action. In 2016, 'energy bonds' were issued to finance the first phase of the project, which involved the completion of five hydro storage reservoirs and matching wind farms in 2021. By 2020, energy saving became one of the highest priorities. Home insulation, micro-generation for those who can afford it and various energy-generation community schemes, such as geothermal plants in Tallaght, Swords and Clondalkin, have been widely applied, along with, most importantly, widespread behavioural change.

Although Dublin city region in 2030 still struggles with many social and environmental problems, positive social changes together with a renewed spirit of the city makes the future hopeful.

Following the construction of the scenarios, a fundamental stage in the prospective process is the formulation of policy themes and the identification of action agendas. These are designed to enable decision-makers to exploit the opportunities and prepare for threats that may unfold in the future.

Five key policy fields that will have a positive impact on the city region were identified: economic development, governance, people and quality of life, built and natural environment, and creativity and innovation. The analysis of contributions from workshop participants and interviewees together with 'wind-tunnel testing' of the three scenarios led to the formulation of a range of action agendas that, if implemented, should help the city region to prepare for the future more effectively.

ECONOMIC DEVELOPMENT

- Cohesive brand for the region. Develop a cohesive brand for the city region that will be shared by all local players and stakeholders to represent and promote the city to potential investors, employers, employees and tourists.
- Education and innovation. Strengthen and enhance the existing education system to provide high-quality education at all levels: primary, secondary, tertiary and fourth-level. Identify strategic areas of science and technology for R&D investment in the region and ensure that appropriate levels of funding are secured to develop them. Incentivise innovation and encourage risk-taking aimed at the furtherance of enterprise and the creation of jobs.
- Effective city infrastructure. Provide an efficient high-capacity public transport system for the region, effective ICT infrastructure, good social facilities and sustainable municipal services. Prioritise public transport investments and improve access to Ireland and the Dublin region by air, sea and land.
- Resource-efficient economy. Promote and prioritise the development of clean and resource-efficient technologies in the energy, transport and construction sectors to facilitate the creation of green-collar jobs. Encourage the development of new products and services with high resource productivity and using renewable ingredients.
- City region partnership. Create a working partnership between all agencies, organisations and individuals responsible for the development of the region to avoid duplication of actions and encourage the sharing of people and resources between these actors to pursue common goals. Foster and facilitate close collaboration between academia, industry and local authorities.



Inspiring the Future: Emissions Trading Institute

Emissions trading is a growing sector within the financial services. Dublin, with 20% of people employed in financial and business services (2008), can use the existing expertise and knowledge to develop a new set of skills and competence in emissions trading. Setting up an institute that would specialise in research and training in this field could be a first step in building this new capacity. It is envisaged that such an institute would bring in world experts to develop training programmes and set out the research agenda for the institute.

GOVERNANCE

- City-region governance structure. Establish a regional government structure for the Dublin city region with directly elected representatives, and powers to raise taxes and set a strategic vision for the betterment of the entire region. Such a structure should have control over transport and land-use planning as well as the implementation of economic, environmental and social policies.
- Regional strategy. Develop a long-term comprehensive future strategy for Dublin which would align national, regional and local priorities. Establish a hierarchical region-wide approach to prioritise economic development from city centre to hinterland towns.
- Funding base. Recognise Dublin's role in the national economy and ensure that the region's funding base is sufficient for that role. Clarify connections between taxes, services and government accountability. Introduce a tax regime that would promote labour and capital investments and discourage speculation.
- Reform of local government. Reduce bureaucracy, redraw local authority boundaries and introduce a funding and liaison officer in local communities.
- Devolution of central government. Reform the political system by reducing its size and by focusing on decentralisation. Ensure that national government policy reflects the distinctive needs and assets of regions.



Inspiring the Future: Mobile Classrooms

Many socially excluded residents of disadvantaged areas in the region are unemployed because of low or no skills. They often lack basic and employability skills and have poor language capabilities. Research shows that they would not (or could not) attend mainstream programmes because they lack self-esteem or, having failed previously in similar programmes, do not want to fail again.

A number of mobile IT rooms could target people on their doorstep and isolated housing estates could be visited on a regular basis, thus making learning accessible in such areas. The vehicles would be completely self-sufficient, with in-built generators and state-of-theart satellite systems for internet access. They would be staffed by teaching, training and employment support professionals able to deliver accredited course and job-search surgeries.

PEOPLE AND QUALITY OF LIFE

- Community development and social inclusion. Improve social inclusion by providing appropriate facilities and a range of educational and employment programmes. Facilitate community development by putting the family back at the centre of planning, focusing on community assets, and increasing middle-class participation in community life. Support volunteerism and ensure the integration of immigrants.
- Youth education. Invest in young people to harness their energy, creativity and innovation. Improve and broaden access to education, especially in the scientific and technical fields. Develop alternative ways of capturing energy and the interests of young people from disadvantaged and deprived areas so as to reduce the risks of them engaging in criminal activities and anti-social behaviour and becoming over-dependent on the social welfare system.
- Access and mobility. Promote public transport by rethinking the network and establishing integrated ticketing solutions. Ensure that local land-use planning prioritises movement (walking, cycling and use of public transport).
- Arts, culture and sport. Publicise Dublin internationally as a region offering a high-quality cultural experience. Continue investing in sporting facilities to foster healthy life-styles and community building. Engage the support of Dublin's mayor for a series of key festivals and events open to all.
- Law and order. Address crime through a more encompassing approach to law enforcement in the region. Tackle crime at its roots through education, special programmes for people at risk, and building a sense of community.







Inspiring the Future: Dublin Heroes' Project

Young people are the future of the city and their role in building a healthy society and knowledge economy is vital. Capturing young people's minds and hearts is crucial to advance social inclusion, reduce crime, develop a strong city identity and ensure that enough young people choose careers in science and technology for Ireland and Dublin to become a knowledge economy. Creating positive role models and showing alternative paths for their future is one way of inspiring young people.

A project, such as 'Dublin Heroes', would identify a range of well and less well-known men and women living and working in Dublin and engaged in fields such as sports, arts, science, social movements and business, who would agree to work with young people through schools and civic projects. A media campaign introducing these people, their work and their relationship with the city could also be part of the project. Additionally, the initiative could be expanded to include other activities under the same umbrella, such as the 'Teens in the Wild' programme (http://www.rte.ie/tv/teensinthewild/). The imagination is the only limit.

BUILT AND NATURAL ENVIRONMENT

- Urban sprawl. Tackle urban sprawl by adopting a region-wide policy for height and density. Ensure that all new developments contain a mix of uses, with a high quality of build and finish. Impose and implement strict regulations on building outside urban zones.
- **Sustainability.** Prioritise carbon reduction and environmental efficiency through the planning process. Avail of green technologies for an effective sustainable development of the region.
- Biodiversity. Invest in and protect strategic natural amenities in the region, particularly the coast and mountains, with the aim of increasing biodiversity.
- Spatial planning. Introduce long-term, integrated regional land-use and transportation planning. Move away from adversarial, matrix planning to a participative and inclusive process at local level.
- Public space. Develop and maintain open high-quality public spaces in urban areas and use them to encourage greater encounter and visibility among the increasingly diverse population. Encourage the development of urban gardens and allotments.



Inspiring the Future: Green Taxis

Environmental sustainability is becoming a key challenge and an important trademark for cities around the globe. As the environmental awareness of individuals grows, their choice will increasingly favour green products and services. A small step that could achieve a lot would be the 'greening' of the city's taxi fleet. It could help to reduce emissions and bring lower costs in the longer term, while also being part of the 'Sustainable Dublin' image. Tax incentives could be applied to persuade taxi drivers to join such a scheme.

CREATIVITY AND INNOVATION

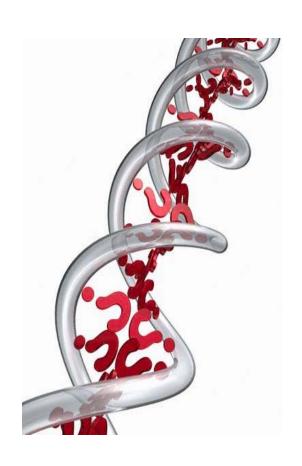
- Education and industry. Review the education system to ensure students at primary and secondary level have the skills to engage in innovation and R&D activities.
- Cultural strategy. Develop a regional cultural strategy. Build on the existing cultural facilities, support cultural initiatives and invest in the soft infrastructures.
- **R&D.** Ensure that R&D activities are aligned to the needs of business and society. Strengthen the links between researchers and business.
- Knowledge economy. Ensure widespread availability of fast and reliable broadband. Develop IT hubs in public facilities as training and development centres. Explore alternative workplace provision.
- Wisdom of the crowd. Use creativity and innovation in a social context by establishing a network of civic-based think tanks. Tap into the skills and expertise of the unemployed by providing facilities for networking and collaboration on civic projects.

Inopiring the Future: Dublin – The New Media Capital

According to European research conducted in the REDICT project (DCU, 2009), the Dublin city region has a small but growing digital media sector, which includes over 140 domestic companies or small and medium enterprises (SMEs) covering all the main sub-segments but with a concentration in a few (Mobile, Animation, Digital Video/Film/Television and Services). These companies benefit from the presence of software and other IT companies in Dublin.

The sector has the potential to have the same impact on Dublin as the IFSC, however, but issues such as a major skills shortage, intellectual property issues, collaboration with educational institutions and investment to facilitate knowledge transfer, have to be addressed to facilitate its further development.

"Leading authorities in digital media have called for the creation of an International Media Services Centre (IMSC) that would manage digital rights for Hollywood and the music industry from Ireland and would have the same impact as the International Financial Services Centre." (DCU, 2009, p. 29)



Dublin is a thriving vital city with quality transport and living communities.

A world-class benchmark for quality of life and successful urban living, based on accessibility, amenity, opportunity, tolerance and cooperation.

A template for mixed used living, internationally, where employment leisure and services are in walking distance or are accessible by public transport from where you live.

A high density consolidated city that is economically strong for all neighbourhoods in the city and globally renowned for the innovativeness of our people and with and excellent quality of life and fun that is distinctly Dublin internationally.

Egalitarian, cohesive, exciting, vibrant and growing that leads the way in sustainable, urban living, a leader in knowledge economy, respecting differences and cultures with a great quality A template for mixed used living, nationally where employment leisure

A creative, sustainable city that is distinctly Dublin

and services are in walking distance

from where you live.

or are accessible by public transport

can live, work and play in a climate that is inclusive

safe and fun.

Dublin will be a vibrant bustling city of distinctive neighbourhoods with their own pedestrianised main streets, football teams, music and architecture.

A creative European, dynamic capital that respects and values its residents and visitors, and promotes quality of its living experience as its distinguishing advantage.

DREAMS

A city attractive to its citizens and visitors which is clean, safe, self-reliant, multicultural and a centre of excellence for industry, culture

A vibrant, diverse, confident, outward looking and inward aware.

FOR DUBLIN

A city of equal opportunity for all its citizens with arts and culture as an integral part of the individuals' life.

A prosperous, safe, clean and sustainable city and region that cherished all its citizens and provides a welcome heart to all its visitors.

Dublin will be a quality, well connected city with all work, residential, and community facilities within walking distance or 'Luas' distance. It will be a city where my children can live and work if they choose to.

A happy vibrant place where people are proud of their place and heritage, are confident of their abilities and hold their heads high locally and internationally.

A city where you can live, work and play in a climate that is inclusive, safe and

A city of 1.5 million people in full em ployment with a good social system that values all of the people.

As I went down Parnell Square, pushing through the bustling crowds of the culture quarter, I hopped on my frequent public transit, back to my carbon neutral district to tend my communal vegetable patch overlooking the playground in the centre of my urban village square!

that is economically stro neighbourhoods in the cit

vith and excellent qual and fun that is distinctly For most of this decade, the Futures Academy has been working on various aspects of the future of Ireland and Dublin. During this time, we have observed a transformation in mindsets and processes within the city and at the national level. The convergence of thinking taking place is demonstrated in new collaborations and alliances, such as increasingly close cooperation between the four Dublin local authorities and the formation of the Creative Dublin Alliance in 2008, which brings together academic, business and local governance leaders in order to progress Dublin's development as a creative city.

Change is taking place at national policy level. In the past, Dublin's importance for the national economy has often been unrecognised or largely underplayed. This, of course, has had major consequences for its long-term strategic development, which is highly dependent on the provision of a modern and efficient city infrastructure and the creation of a robust regional governance system. We welcomed the publication of the National Competitiveness Council's report, *Our Cities: Drivers of National Competitiveness*, in April 2009, which not only recognised the critical importance of Ireland's cities for its future development, but also recommended "promoting Dublin as a key driver of national competitiveness". We are also awaiting the introduction of legislation for a directly elected mayor of Dublin and changes to the local governance system.

The new dynamism, growing confidence and renewed commitment within the city are remarkable. Yet Dublin, like the rest of the country, faces important challenges. In the three scenarios developed in this study, we have tried to explore alternative possible futures for the Dublin city region in 2030. Although Dublin's future is affected by a whole range of global factors, major policy decisions, or the lack thereof, at the national level will predominantly shape the region throughout the coming decades.

The current economic crisis poses significant threats to the well-being of the region, but it also opens up opportunities for change. On the one hand, reduced investment in regional infrastructure, especially for public transport and ICT facilities, and significant cuts in the education sector without any improvement in practices and processes, could seriously impede the further development of the city. On the other, the crisis presents an opportunity to place people and environment at the heart of planning and policy-making. Too often over recent years, Ireland has been referred to and treated as an 'economy' rather than a 'society' or a 'place'.

Cities and countries that invest in their people and give priority to the protection and enhancement of their natural environment will, in the long term, create more just, happier and healthier societies, as well as more stable and sustainable economies.

BIBLIOGRAPHY

Bartley, B. and Kitchin, R. (ed.) (2007) *Understanding Contemporary Ireland*. Pluto Press, London.

Byrne, G. et al. (2009) Sustainable Urban Infrastructure. Dublin Edition – A view to 2025. Siemens Limited, Dublin.

Central Statistics Office (2008) Regional Quality of Life in Ireland 2008. Stationery Office, Dublin.

Coleman, M. (2007) The Best is Yet to Come. Blackhall Publishing, Dublin.

DCU (2009) The Needs of the Business Community and Other Actors in the New Media Sector: a Report on the Dublin Region. EU 7th Framework Programme, FP7-REGIONS-2007-1, REDICT project 206480. Available at: http://www.clarity-centre.org/files/REDICT report.pdf.

DoELGH (2002) *National Spatial Strategy for Ireland 2002-2020: people, places and potential.* Dublin: Stationery Office, Dublin.

Glenn, J. C. and Gordon, T. H. (2007) 2007 *State of the Future*. World Federation of United Nations Associations, Washington.

Godet, M. (2001) *Creating Futures: Scenario Planning as a strategic management tool.* Economica, London.

Hawken, P. et al. (1999) Natural Capitalism. Earthscan, London.

Lindgren, M. and Bandhold, H. (2003) *Scenario Planning: The Link between Futures and Strategy*. Palgrave MacMillian, London.

Martin, J. (2006) The Meaning of the 21st Century. Eden Projects Book, London.

McGreal, W. S. et al. (2003) *The East Coast Corridor: Spatial Development Strategies for the Dublin-Belfast Metropolitan Regions*. Journal of Irish Urban Studies, Vol. 1, No. 2, pp. 19-30.

National Competitiveness Council (2009) *Our Cities: Drivers of National Competitiveness*. Forfas, Dublin.

Ratcliffe, J. and Sirr L. (2003) Futures thinking for the built and human environment: The Prospective Through Scenario Thinking for the Built and Human Environment. Available at http://www.thefuturesacademy.ie/sites/default/files/Futures-thinking-for-the-built-environment-and-human-environment.pdf, accessed 15th April 2009.

Ratcliffe, J. (2002) Scenario Planning: Strategic Interviews and Conversations. Foresight, 4(1), 19-30.

Schwartz, P. (1998) The Art of the Long View. John Wiley, Chichester

The Futures Academy (2008) *Twice the Size – Imagineering the Future of Irish Gateways*. DIT, Dublin.

Williams, B. and Shiels, P. (2002) *The Expansion of Dublin and the Policy Implications of Dispersal*. Journal of Irish Urban Studies, Vol. 1, pp. 1-21.

APPENDIX 1

Participants of the Workshop on 16th January 2009

Anthony Abbott King Dublin Docklands Development Authority

Tom Coffey Dublin City Bussiness Association

Eddie Conroy South Dublin County Council

Kieran Cuffe Green Party

Jack Gilligan Dublin City Council
Dick Gleeson Dublin City Council

John Henry Dublin Transportation Office
Paul Hogan South Dublin County Council

Ray Hogan Archdiocese of Dublin

Ronan King Dublin Chamber of Commerce

Frank Magee Dublin Tourism

Lorna Maxwell Dublin City Council

Catherine McCabe Dublin Chamber of Commerce
Aebhric McGibney Dublin Chamber of Commerce

Dermot McLaughlin Temple Bar Cultural Trust

Ciaran McNamara

Dublin City Council

Owen O'Doherty

Dublin City Council

Dublin City Council

Trinity College Dublin

City Council

John Phelan Dublin Business Innovation Centre

James Pike O'Mahony Pike
Kieran Rose Dublin City Council
Declan Wallace Dublin City Council

Interviewees

Sean Coughlan Social Entrepreneurs Ireland

Caoimhe Gavin Forfas

Werner Kruckow Siemens Ireland

Dermot Lacey Dublin City Councillor, Labour Party

Terry Landers Microsoft Ireland

Gordon McConnell Dublin City University

Michael O'Connor Siemens Ireland

Terence O'Rourke KPMG

Ferdinand von Prondzynski Dublin City University

