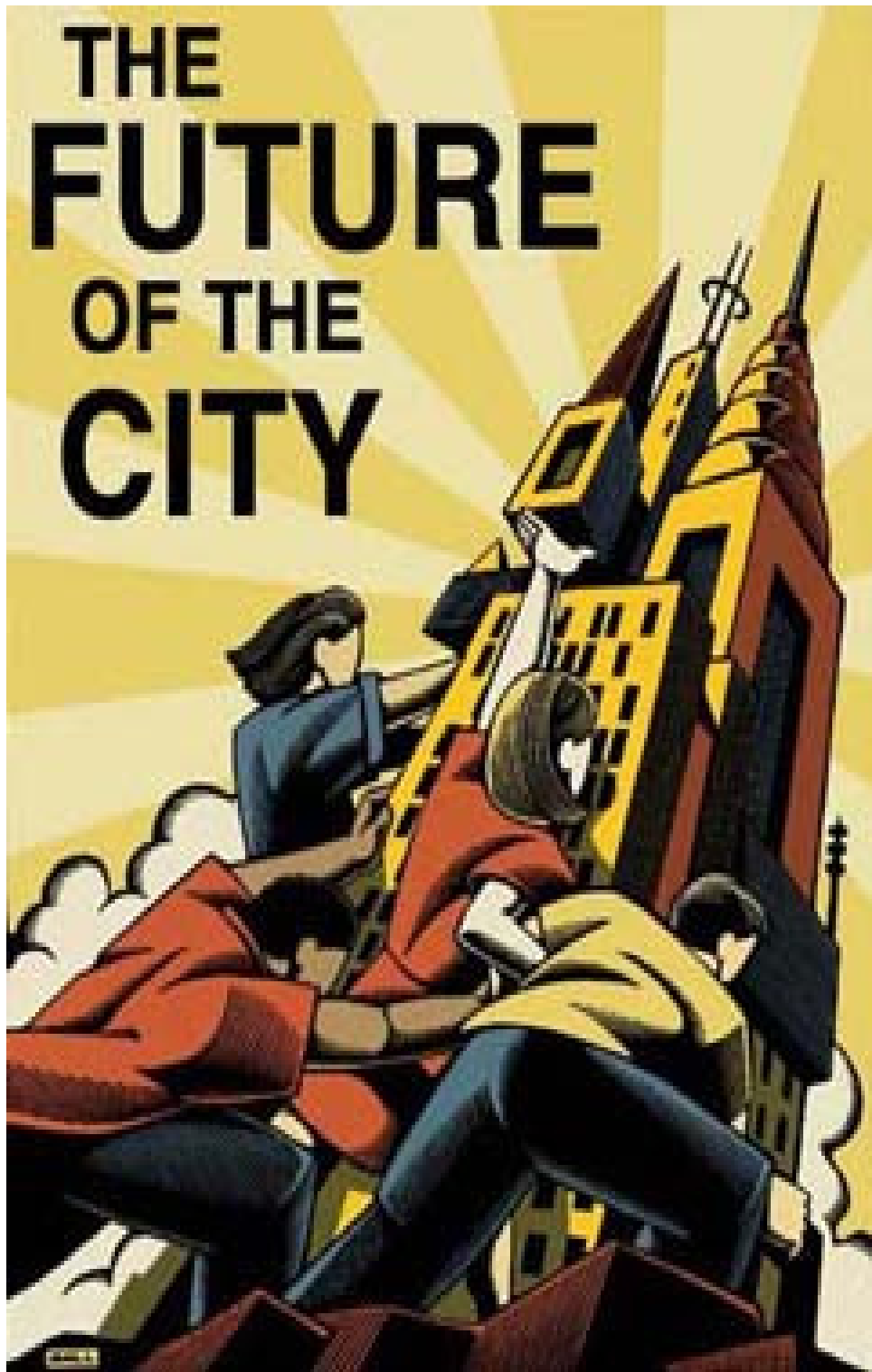


THE FUTURE OF THE CITY



Dublin City Foresight

An Analysis of the Future of Dublin

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History

A scenario is a rich and detailed portrait of a plausible future world, one sufficiently vivid that a planner can clearly see and comprehend the problems, challenges, and opportunities that such an environment would present. A scenario is not a prediction of specific forecast per se; rather, it is a plausible description of what *might* occur.

Scenarios describe events and trends as they could evolve. The future can never be accurately or completely known because of the multiplicity of forces that shape the future, their complexity and their interactions. Consequently, most planners and futurists today reject the idea that planning should be conducted against a single “most likely” image of the future. Rather, sets of scenarios should be used in planning; if the sets encompass a broad span of futures and plans are generated to cope with their eventualities, then the plans will be robust and the future can be met with some degree of confidence. Scenarios are narrative descriptions of the future that focus attention on causal processes and decision points (Kahn 1967).

No scenario is ever probable; the probability of any scenario ever being realized is minute. Accuracy is not the measure of a good scenario; rather, it is:

- Plausibility (a rational route from here to there);
- Internal consistency;
- Description of causal processes; and
- Usefulness in decision-making.

The term “scenario” comes from the dramatic arts. In the theater, a scenario refers to an outline of the plot; in movies, a scenario is a summary or set of directions for the sequence of action.

In fact, Peter Schwartz of Global Business Network, a think tank in Emeryville, California, often compares the initial process of creating a scenario with writing a movie script (Schwartz 1992).

Often in creating a scenario, a team of people consider such questions as: What are the driving forces? What is uncertain? What is inevitable? Similarly, scriptwriters formulate an idea and develop characters. Schwartz describes characters as the building blocks of scenarios.

Herman Kahn introduced the term “scenario” into planning in connection with military and strategic studies conducted by the Rand Corporation in the 1950s. He further popularized the concept in the 1960s as director of the Hudson Institute, a private nonprofit research center devoted to issues related to U.S. public policy, international development, and defense. In 1967, Kahn along with Anthony Weiner examined the future possibilities of world order, describing potential power alignments and international challenges to American security in a book entitled *Toward The Year 2000*.

One of their worlds depicted an arms control agreement between the United States and the former Soviet Union; another assumed the former Soviet Union would lose

control of the Communist movement; a third projected construction of new alliances among countries. In the book, Kahn and Weiner also described the technology “hardware” of the future, which included centralized computer banks with extensive information on individuals as well as parents able to select the gender and personal characteristics of their children through genetic engineering.

This work was done under the Commission on the Year 2000 sponsored by the American Academy of Arts and Sciences. Corporations developed scenarios as their planning became more sophisticated. Shell International Petroleum Company (Royal Dutch/Shell Group, in the Netherlands) used scenarios before the 1973 oil shock. The method proved useful in allowing Shell to anticipate the rise and subsequent fall of oil prices. In the mid-1980s, Shell created scenarios that focused on the future of the Soviet Union because that country was a major competitor in the European gas market.

The onset of the energy crisis encouraged scenario development and introduced it to the public. Two well-known energy futures scenario projects were Project Independence (Federal Agency Administration, 1974) and the Ford Foundation’s Energy Policy Project (Freeman, 1974). These scenarios helped stimulate public awareness to the seriousness of the energy problem.

Both the public and private sectors have developed and utilized scenarios for a wide array of purposes. The public sector employed scenarios for defense planning, delineating alternatives for U.S. agricultural and environmental policies, and numerous other applications. Scenarios have been used to explore the future of South Africa (Esterhuysen 1992) and Los Angeles (Millett 1992).

Almost all industries in the private sector employed scenarios. The financial services industry, for example, used scenarios widely to understand the significance of economic, competitive, and regulatory uncertainties. Major banks and insurance companies, such as Allied Irish Banks plc, utilised scenarios to assist strategic planning in an ever-changing environment.

Introduction

‘Every few hundred years in Western History there occurs a sharp transformation. Within a few short decades, society rearranges itself – its worldview; its basic values; its social and political structure; its arts; its key institutions. Fifty years later, there is a new world.’(Drucker,P. 1993)ⁱ

It could be suggested and to many is clear that the nation and people of Ireland, and for that matter perhaps the rest of the world, are living through just such a transformation today. A prime manifestation of this transformation is the way we think about, plan, develop, manage and live in cities. If we cast our minds back to how the city of Dublin looked at lived in 1985 we are amazed at the changes that have occurred and the speed at which they occurred, transforming Dublin into an unrecognisable cosmopolitan European City.

One thing is certain; the city of tomorrow will be fundamentally different to the city of today. Everything else is not so certain. What is needed is a sustainable approach towards framing, testing and monitoring present policies for the planning and development of cities so that they are proofed, so far as possible, against the vagaries of future change.

The purpose of this research is to test the Foresight Principle through Scenario Planning and Learning as such an approach using the City of Dublin as a case study.

What is Scenario Planning?

Scenario Planning derives from the observation that, given the impossibility of knowing precisely how the future will play out, a good decision or strategy to adopt is one that plays out well across several possible futures. To find that 'robust' strategy, scenarios are created in plural, such that each scenario diverges markedly from the others. These sets of scenarios are, essentially, specially constructed stories about the future, each one modelling a distinct, plausible world in which we might someday have to live and work.

Yet, the purpose of scenario planning is not to pinpoint future events but to highlight large-scale forces that push the future in different directions. It's about making these forces visible, so that if they do happen, the planner will at least recognize them. It's about helping make better decisions today.

Step 1 - Formulation of the Strategic (Focal) Question

Defining the decision focus - In delineating the scope of the 'Dublin City Foresight' project, it was determined that there were four defining issues to consider. The project should:

- Deal explicitly and effectively with the full range of uncertainty in the medium term future, a time line of 2015 was set.
- Take account of future economic, technological, environmental, governmental, demographic and cultural conditions.
- Be compatible with existing planning and management culture within the Greater Dublin Area.
- Be capable of developing a range of plausible strategic options.

The scenarios focus on the future of Dublin. Within that context, it is useful to focus the discussion further by identifying the key question to be answered by the scenarios.

Resulting from workshop 1, discussion with my supervisor(s) and the selected interviews. An initial question was modified to read:

“What policy measures should be implemented now in order to secure the sustainable planning and development of Dublin?”

Sustainable, a. (f.pec.+Able.Cf. Sustenable) capable of being upheld or defended: maintainable

It has been determined that the scenarios would focus on the sustainable planning and development of Dublin. Given Dublin’s prominence as Ireland’s premier city, the scenarios would also take into account key aspects of Ireland’s cultural, political, and economic situation. Sustainability in planning and development was singled out because of the spiralling development of Dublin over the past 10 years. Its growth in terms of population, land mass and economics has been phenomenal and begs the question ‘*What next?*’.

In a parallel analysis performed at the same time, an assessment of Dublin’s current situation was undertaken. This analysis took the form of Environmental Scanning. The precise origins of Environmental Scanning are unclear, but much of it focused on identifying economic developments. Soon, it came to include the tracking of prospective technological innovations, and then social trends and change. By the late 1970’s it was recognised that new legislative and regulatory requirements needed to be monitored. In essence, it involved a broad scrutiny of all major trends, issues, innovations, events and ideas across the spectrum of activities deemed relevant for the particular study. This can however be very broad. The method used in this research project is the six sector approach advanced by Kotler (1997)ⁱⁱ which classifies information according to the following areas: Culture, Demography, Economics, Environment, Governance and Technology. An example of this for of scanning for real estate can be found at www.mcb.co.uk/pmgf (Ratcliffe, 1998).

The objective of environmental scanning is not to predict the future but to help decision makers in situations of increased uncertainty. It has become increasingly important, mainly as a consequence of the growing need for planners and policy makers to have information on the general environment outside their specific area of interest as well as within it. The perspective gained is thus more of an outside-in than an inside-out one. Careful scanning results in the development of a body of information with a range of uses, and the process of scanning itself has the value of sharpening observation and analytic skills while providing opportunities to hone discrimination, judgement and expression (Slaughter, 1995)ⁱⁱⁱ

The Environmental Scanning process has devilled into many publications both public and private sector such as those contained in Appendix 1.

In this parallel analysis performed at the same time, an assessment of Dublin’s current position was established. This assessment had no bearing on the scenario development work itself, but will play a major role later in examining the strategic implications of the scenarios.

2) Driving Forces –

Since scenarios are a way of understanding the dynamics shaping the future, the next stage in the process is to identify the primary “driving forces” at work in the present.

***What are the major forces driving change that impact the strategic question?
What other factors could impact the future of Dublin?***

From a long list of factors and forces, nine major forces were defined (Figure 1). These are the forces driving future change. These are the elements, or dimensions; we need to focus on in describing the future of Dublin. All need to be included in the scenarios.

Figure 1 Major Factors and Forces Driving Change

- Local and National Government policies
- Economic growth & structural change
- Demographics
- Globalisation
- Technological change
- Infrastructure/Transportation pressures
- Cultural identity and values (Irishness)
- Environmental concerns

Issues and Trends

From the exploration of the general driving forces of change, more particular issues and trends pertaining to the future of Dublin were identified. These Issues and Trends were diagnosed and classified according to the six-sector approach outlined above.

Method

Over 20 selected persons were invited to attend a workshop on (DATE), a full listing of attendees can be found in Appendix 2. In conjunction with this 12 interviews taking the form of the *Strategic Conversation* were held with leading professionals with a focus on Dublin City (Appendix 3 Interviewees Listing).

During the workshop the attendees were broken into three groups, each group was given two topics from the six-sector approach as demonstrated in Figure 2.

Figure 2 Sector distribution at workshop 1	
Group	Topic
Group 1	Cultural, Demographic
Group 2	Technological, Economic
Group 3	Environmental, Governance

The groups were asked to ascertain what they considered would be the main issues and trends with an effect on Dublin City over the next 15 years. In excess of 150 Issues and Trends were recorded at workshop 1 a full listing of these can be found in Appendix 4.

Impact/ Uncertainty Analysis

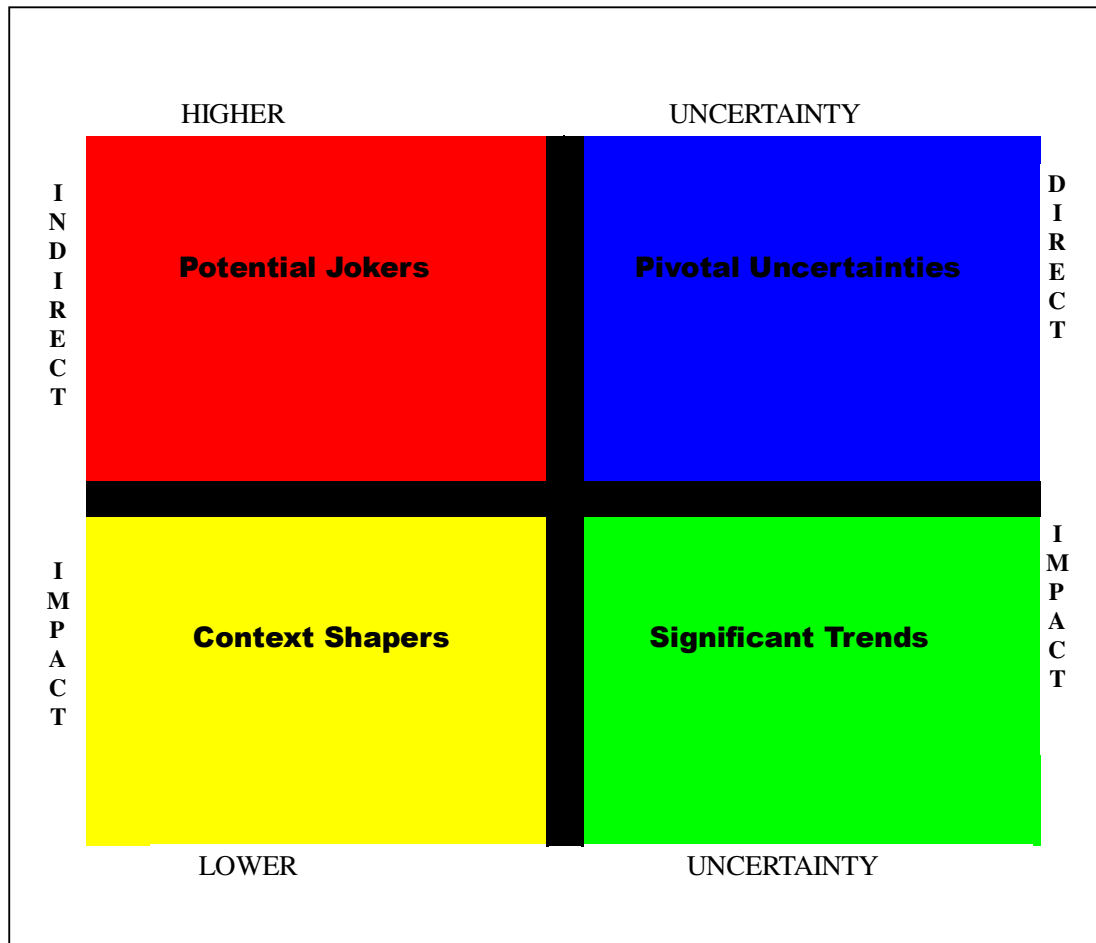
Subsequently, the same group were asked to rate these issues and trends according to their likely 'level of impact' and 'degree of uncertainty' as demonstrated in Figure 3 below.

Figure 3 Impact and Uncertainty Ranking

ISSUES AND TRENDS - DUBLIN CITY FORESIGHT IMPACT AND UNCERTAINTY		
<p>You are asked to consider and rate the following issues and trends described below as a "List of Issues and Trends" on the scale of 1 to 5 in the appropriate box. Please try to minimise the use of 3 as a level of rating.</p> <p>Impact - 5 = Most Important / Very High Impact. 4 = Important / High Impact. 3 = Modest Importance. 2 = Unimportant / Low Impact. 1 = Trivial</p>		
List of Issues and Trends	Impact (1= low to 5= high)	Likelihood (1= low to 5= high)
Economic		
Changing economic fortunes over past decade		
Political appetite for state intervention in provision of a range of income support schemes i.e. pension/social security		
Substantial proportions of the Irish population are prepared to vote with their chequebook in response to the possibility of cheaper services in another Euro-currency country...		
<p>Likelihood. 5 = Most certain by 2015. 4 = Likely. 3 = As likely as not. 2 = Unlikely. 1 = Almost impossible by 2015</p>		

The workshop attendees scored each uncertainty under the two headings described in Figure 3. Each uncertainty was plotted via its aggregated scores as a point in the plane and the resulting scatter-graph was analysed into four quadrants as shown in Figure 4.

Figure 4 Positioning Issues and Trends



Each quadrant has a different interpretation as follows; (GBN, 1999)

Pivotal Uncertainties: These are likely to have a direct impact, but their outcome is uncertain. These are pivotal in the sense that the way they turn out may have strong directional consequences. These are the areas that will determine the shape of different scenarios.

Potential Jokers: These are pretty uncertain as to their outcome and less relevant. However, it could be dangerous to treat them as mere ‘noise’.

Significant Trends: These impact more directly upon the question in hand and it should be possible to anticipate their effect.

Context Shapers: These are relatively certain and, therefore, will surely shape the future context.

In the scenario building exercise described here, the factors in the context shapers quadrant were woven into every scenario when fully written-up. The significant trends also ran through each scenario, but the way in which they were developed was different in each one. The potential jokers were also useful factors to bring into a scenario when a surprise or distinguishing element was felt desirable (IDON, 1996)

It is the pivotal uncertainties, however, that are central to the construction of the alternative scenarios.

Breakdown of Matrix Details

WILD CARDS	
New Governance – market – Ideology – Populist – Democratic – Law	Ideology/ Religion – to refrain from participation in global and/or multinational employment or consumption – 'Fatima of Beirut'
Power Failure and Gridlock	Collapse of Peace Process in Northern Ireland – spread to Dublin
City Government V's Nation Government	Economic Stagnation
Value changes e.g. Post Materialism	National Unity – Placing further emphasis on Dublin Belfast Corridor
Loss of Irish Competitiveness and collapse of Strategic Advantage	Manipulated consciousness
Individualism	Increasing Entrepreneurialism in Governance – administration – Policy formulation – SPG – Consensus – Spatial – Local Access
Crash in the Economy	Revolution in Saudi Arabia – closing of Saudi Oil supplies
Not moving to governance from government but moving towards administration	Ethics change – Value Change - Awareness
Large Scale Industrial and Public sector unrest	Meteorite Hit
Civil Strife – Bombing campaign, Bio-Terrorism	World War 3

CONTEXT SHAPER	
Consensus and consultation	Intellectual Property
City as centre of region	Social exclusion and its implications
Infrastructure development – behind and curtailing 'business'	Greater Dublin region
Global centralisation and concentration of capital – Power of trans-national companies	Globalisation – Internationalisation
Emergence of cultural attributes as a commercial product	Historical example of similar growth bursts in Dublin
Planning – Outsourcing of consultancy	Congestion Costs
Distribution of wealth – dislocation – segregation	Access to tertiary education by subsidy maintenance for socially deprived or excluded
Technology and ability to transcend the market	Impact on living and consumption patterns, hence shape of the city design
Public Policy	Smart materials
New forms of local Government, comprehensive planning for small areas contradictions	Regional differentials a national increase growth
Biotechnology 'safe home' in Ireland	Housing Form 20% Nuclear
Branding	Societal Change
Heritage – Historical legacy – Conservation	Local Input – Planning etc – Effective or Window Dressing
Tribunal + Politics	Environmental costs

Impact of Media	Marketing
Introduction of rates – future economics of e-commerce	European City
Private Sector and consultants	Spatial fragmentation and competition between authorities for RATES BASE
Medical Implications	Cleaner environment
Legislation EU	Design Urban Terrorism
Consumer Demand Quality of environment	Environmental Pricing/ Auditing & Labeling
Ensure adequate support services and infrastructure (e.g training, staff, money, facilities)	Ensure environment is represented in decision-making via process structure
Cultural will to enforce	Household organisation
City State	Emergence of a Dublin Super Region, expanding from City Centre
Dublin Region Dublin Heart – Both need to circulate the blood	Transportation Improvements
Swedish Model – Children have more parents than parents have children	Are number of houses increasing relative to population increase?
Social Exclusion	Entrepreneurial Planning – Special authorities / Agencies
Community Activism	Internet growth
Urban Growth Management	Accommodation de-coupling
Human Health	Encourage environmental collective action
Sustainability – sustainable options	Hinterland and City – supporting or supported by
Rate based planning	Geographical basis of governance
National Spatial Strategy	Leisure, sport and culture as an economic driver

SIGNIFICANT TRENDS	
Centralisation (increasing) of and due to e-commerce	Split residency – between home and work between home and other home
Trend Led / Vision Led	Affordability of necessities
East Europe / West African immergence	Household size and Aging
Government – great emphasis on regulation. Less Government service by trading entities	Impact of IT on real economy of production
Correct support services	Cloning
Entrepreneurialism in Governance 'can do' supportive facilitative of capital	Education
Finite Resources / Pricing Resources	Low Height City
Litter Education	Water Wars
Housing size	Housing ad built environment implication of facility 'breakdown and restructuring'
Construction as an excuse – especially over land and property right	National Psyche
Growth in Telecommunication technology producing dependence on central urban locations – may have opposite effect	Funding structure changes
Increasing effective power of city and Co. managers	Community and stakeholder participation in local areas – within the city
Lack of indigenous economic growth	The corporetisation of leisure – tendency to segregation
Funding Structure changes	Paradigm Shift of economic base / taxation policy e.g. Transfer policy
Ethnic Minorities Diversity	Better Local Government
Americanisation of Ireland and World	Irelands need for economic catch is driving

	current day ad-hockery for at
Will Ireland become richer because Dublin grows –V- constrain Dublin + grown regions	Segregation (enclave/ghetto)
Centralisation + Localisation	
	Impact on lifestyle telecommuting web shopping
Skills important package	Movement to Urban Centres
Technology relies on Energy	Quality of the connection
Administration fragmentation – Functional and Spatial	Spatial Hierarchy of Government and distribution of powers – National , Regional , Co. / Metro/ Urban etc
Medical Improvements Longevity	City as brand
Policy Engines – Entrepreneurial	Densification of Activity
Role of State in Economy – Further withdrawal / rolling forward, Impact	Dublin may define role of other economic developing areas in Ireland
Finite resources	Centralism – DOE and Minister
Power / Energy Limitations	

PIVITOL UNCERTAINTIES	
Implications of Taxation	Peripheralisation of Ireland in EU and Europe
Economics of E-commerce	Globally defined local economy – loss of local identity
Loss of Traditional Values	Immigration and emigration
Power of Urban / co. Manager	Regionalisation supply and marketing not centred in Dublin
Food GMO – Organic	Fragmentation of central institution of city government
Legislation base	Status of Dublin has changed moved from provincial to international status
Elected Mayor – a celebrity?. Local Authorities of the future being willing to cede some power to the Dublin regional authority	Applications of new technologies to built environment and infrastructure
Celebrity and accountability EC expense of legislative standards	Dislocation of population
Class perception of difference increases with wealth	Demographics – Economics / Household size / ageing / immigration /
Challenge of education / Political scenarios / Market led V's command / planning led	Wealth
More diverse and complex organisation	Class Problems – Poor get poorer/Rich get richer
Erosion of fiscal case of government - transactions taking place or Internet	Dependence on foreign Investment for Economic growth
Subsistence – EU / National / Regional / County / Community	Consensus
Direct Action	Technology Tool / Threat
Reality Isolation	Investment in Education / Housing / Ageing
Multi- Ethnic V's dominant immigration groups	Social/ Cultural led technology change or vice versa
Free trade / Competition	Social / Cultural led technological change or vice versa
Influence of media on Governance	Cultural positioning of United Ireland
Restoring technological advantage	Technology & Demographics

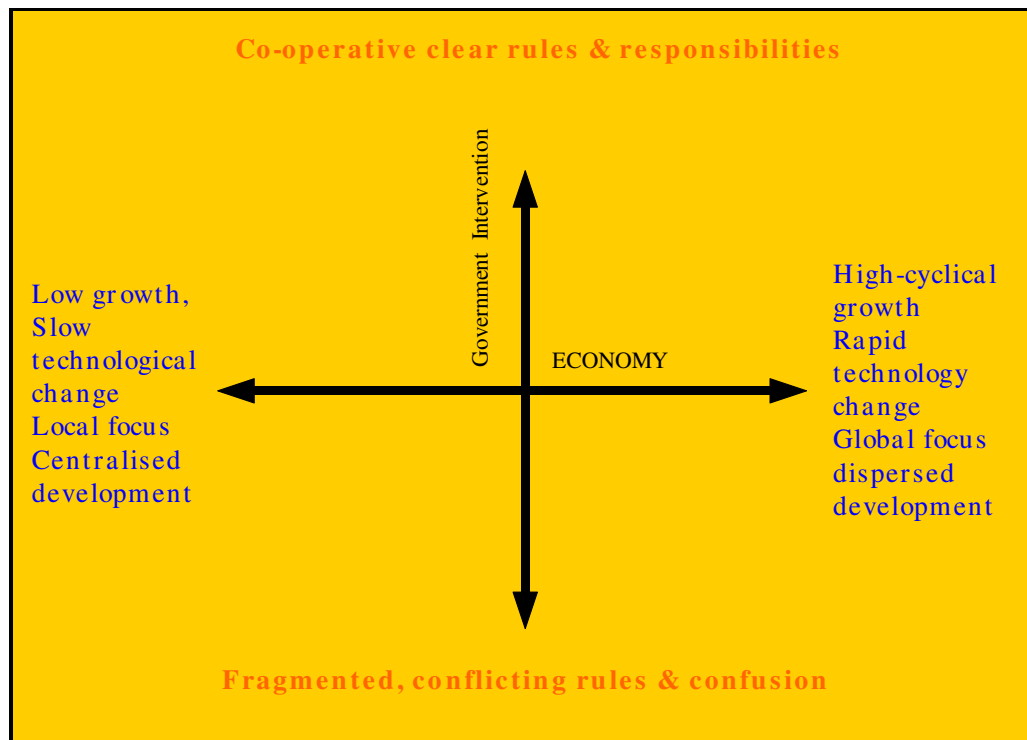
3) Dimensions of Uncertainty

Some forces are predictable. We are confident in their direction and impacts. These are often referred to as predetermined elements. We should plan for these changes under any scenario, because they appear to be certain. Other forces, however, are unpredictable. Either their direction or future impacts are uncertain. In short, for these key uncertainties there is a wide range of possible future outcomes. These uncertainties are important because they lead to diverging paths for the future. They are critical in defining different scenarios. To identify these, the following question asked was:

Of the major forces identified, which two have the greatest potential to change significantly the future of Dublin?

Two key uncertainties were defined. These may be represented as two dimensions forming orthogonal axes as shown in Figure 5.

Figure 5 Dimensions of Uncertainty



One key uncertainty was defined as "**Economy.**" At one extreme, the future could be characterised by high, cyclical economic and population growth and rapid technological change where the economy of Dublin is focused outward on global relationships and growth within the region is widely dispersed. Alternatively, the future could be characterized by low, stable growth and slow technological change leading to a more local economic focus and centralised development within the region.

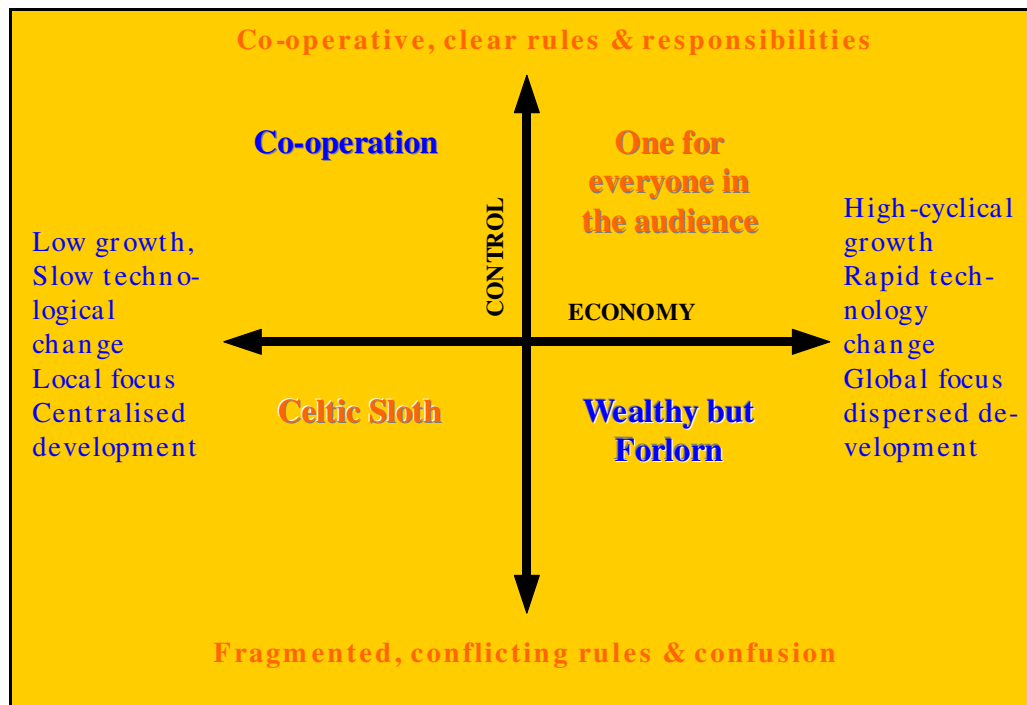
The other key uncertainty was defined as "**Government Intervention.**" At one extreme, relationships within the region and with other levels of government could be

cooperative and flexible with clear roles and responsibilities. Alternatively, relationships could be fragmented and rigid, with poorly defined and conflicting roles leading to confusion and acrimony.

4) Scenario Logics and Characteristics

The key uncertainties provide a logical framework for developing scenarios. Each quadrant in Figure 2 represents a different combination of uncertainties and different future outcomes. The challenge is then to develop scenarios that describe in more detail the characteristics of each future and show how that future could come about. Characteristics for each scenario were developed and formed the basis for the scenarios presented below. The names selected for the scenarios are shown in Figure 6

Figure 6 Future of Dublin – Scenario's Plotted



Descriptions of each scenario are presented below. The descriptions include a brief overview highlighting the key characteristics of the scenario, followed by a more detailed story.

Figure 7 presents the scenario logics as they are presented in each scenario.

Figure 7 Scenario Logics				
Scenario	1. One for everyone in the Audience	2. Wealthy but Forlorn	3. 'Stagnation'	4. Co-operation
Main Themes	<ul style="list-style-type: none"> • Strong growth • Dramatic change • Co-operation across regions • Challenge to manage economic cycles, expectations 	<ul style="list-style-type: none"> • Strong growth • Strong rivalry • Uncoordinated development • Conflict amongst authorities 	<ul style="list-style-type: none"> • Growth Stagnant • Heavy conflicts amongst authorities • Lack of infrastructure development 	<ul style="list-style-type: none"> • Humble growth • Lack of resources • Co-operation amongst local government and national • Community values prevalent
Economic factors	<ul style="list-style-type: none"> • Rapid cyclical growth • Strong traditional growth + high tech growth = diversified economy • Cooperation to meet global competition 	<ul style="list-style-type: none"> • Strong cyclical growth • Traditional growth + high tech + gov't = diversified economy • Intense competition to attract development 	<ul style="list-style-type: none"> • Very slow growth • Traditional decline + weak gov't sector = stagnation • High unemployment • Centralisation of jobs 	<ul style="list-style-type: none"> • Low economic growth • Weak traditional growth + modest gov't growth = stable economy • Balance city and regional growth
Governance	<ul style="list-style-type: none"> • Planning led development • Mutual respect & cooperation • Harmony • Roles & responsibilities clear from outset 	<ul style="list-style-type: none"> • Reactive planning • Competition & rivalry • Provincial interventions • Confusion over roles & responsibilities 	<ul style="list-style-type: none"> • No effective planning • Conflicts & fragmentation between relevant parties • Frustration • Us-them attitude 	<ul style="list-style-type: none"> • Co-operative planning • Cooperation out of need • Provincial support • Joint roles & responsibilities

Social Values	<ul style="list-style-type: none"> • Basis in Economic priorities: work and incomes • Affluent: high service expectations • High indiv/ community participation • Fading of community identities 	<ul style="list-style-type: none"> • Economic priorities: jobs and incomes • Affluent: high demand for services • Low levels of participation • Preservation of identities/ autonomy • Ghettoisation 	<ul style="list-style-type: none"> • Social priorities: community and security • Immigrants and low incomes = high social needs • Apathy • Strong community identities • No young people 	<ul style="list-style-type: none"> • Social priorities: community and family • Rationalisation of services • High volunteer activity • Strong community identity
Transportation & Infrastructure	<ul style="list-style-type: none"> • Massive expansion • Challenge to manage growth / timing • Regional "suburban" road network • LRT/ Metro expansion 	<ul style="list-style-type: none"> • Major expansion • Planning always lagging • Radial and "ring" road system • Metro/ LRT expansion 	<ul style="list-style-type: none"> • Maintenance and repair • Decaying infrastructure • Centralized road pattern (upgrades) • No LRT expansion 	<ul style="list-style-type: none"> • Upgrades and maintenance • Sharing, "make-do", improvisation • Centralized pattern • LRT expansion
Housing Affordability	<ul style="list-style-type: none"> • Strongly rising property values after initial lull 	<ul style="list-style-type: none"> • Rising property values after initial lull 	<ul style="list-style-type: none"> • Stagnant, falling property values – never recovered 	<ul style="list-style-type: none"> • Incremental increases in property values
Densification	<ul style="list-style-type: none"> • Dispersed, low density development 	<ul style="list-style-type: none"> • Dispersed, low density development 	<ul style="list-style-type: none"> • Centralized, high density redevelopment 	<ul style="list-style-type: none"> • Centralised, high density development
Population	<ul style="list-style-type: none"> • High growth • Population in 2015 = 2.7 million 	<ul style="list-style-type: none"> • Moderate to high growth • Population in 2015 = 2.3 million 	<ul style="list-style-type: none"> • Very low growth • Population in 2015 = 1.6 million 	<ul style="list-style-type: none"> • Low growth • Population in 2015 = 2 million

One for everyone in the Audience

Summary

"One for everyone in the Audience" is a future characterised by rapid dynamic growth and development. Traditional (manufacturing/technology) companies prosper and a variety of new, technology-driven companies mushroom across the Greater Dublin Area (GDA). The economy diversifies. Jobs are in abundance. Population grows. Pressure on infrastructural development is intense. There is a global influence with links to businesses and markets around the world multiplying. Cyclical downturns, punctuating periods of growth, add to the challenges of managing and coordinating physical and social infrastructure development. Processes for cooperation and public involvement are strengthened and expanded. Consensus building is critical to meet the planning needs of the GDA. Mutual respect and cooperation between Local authorities and other important bodies such as CIE and the Dublin Transport Authority and the national government are part of the consensus building process and vital in reinforcing and sustaining growth. By 2015, the GDA is a dynamic economic region of over 2.7million people, even more prosperous, confident, progressive and exciting.

THE STORY

In **'One for everyone in the Audience'**, dynamic economic growth and development drive the region. Technology based industries expand. North Dublin and western Dublin are opened to new re-development and the city prospers from the movement of Dublin Port to Lough Shinny. In its wake land is released for residential and leisure development and the building of the National Conference Centre in 2006 followed hotly by an impressive water side Opera House (on Poolbeg peninsula) where an aging Andrea Botchelli makes a return visit for the opening Gala in 2012. This new area is alone in its high-rise development but even then only in select and carefully planned areas away from the historic parts of the city.

New Industries

Technology-driven firms multiply. Some are large, but many are small. Some are spin-offs or directly linked to multi-national companies. Many, however, are new (indigenous) entrepreneurial start-ups drawing on the educational talents in the region. Some grow to significant size. Some remain home-based with only one or two employees. All are linked globally. All must compete directly or indirectly at a global level since competition knows no boundaries.

This economic growth is thanks to liberal labour policies, which allowed for the importation of necessary manpower, through immigration from within the EU (especially the new Eastern European member states) and beyond. This new wave of employees has filled the large gaps left by demographic middle age spread.

This dynamic growth creates an even more diversified and prosperous economy. Incomes rise. Some individuals become very wealthy. Work is plentiful and high-value job opportunities abound. Population expands as the GDA attracts workers from

across Europe and internationally. This puts pressure on some social services. Economically, the GDA is an exciting place.

Growth Challenges

Growth also creates challenges similar to those experienced during the infamous Celtic tiger years. There is intense pressure within the region to provide the infrastructure for business and meet the service demands of the population. Infrastructure needs reflect both the overall increase in economic activity and the distribution of development. Economic growth is widely distributed. Some businesses locate in the core. Others locate in new and expanded industrial areas around the city. Yet others, many self-employed, locate in home offices, or small office complexes tele-hotels and serviced offices become favoured alternatives.

Similarly, residential developments are widely dispersed. Preferences for single detached housing, often up-scale developments on large plots, contribute even more to urban sprawl. The trend is toward low-density residences and townhouse developments rather than high-rise buildings, except in the re-developed Poolbeg peninsula.

Dispersed Development

These trends put severe pressure on physical and social infrastructure development. With dispersed development, transportation flows of both goods and people is dominated by sectoral rather than radial movements. This means that movements from one community to another around the periphery, or across the region, increase much more than movements into and out of the core. The need is for ring roads as part of a regional network rather than trunk roads or high volume transit lines into the city centre. The building of the M50 at the turn of the century was not enough and the Arklow to Drogheda By-Pass is still not completed. The LUAS light rail transport system and metro are installed successfully but it is never really enough, both are due for yet another expansion and seem to be constantly playing catch-up. Similarly, low-density expansion puts pressure on other services. Water and sewage facilities, extended to new suburbs, are expensive to build and maintain. Providing other services from new schools to parks to recreation facilities is also difficult.

Planning Challenges

The challenge is to develop infrastructure in a timely and coordinated fashion. Timing is difficult as cyclical fluctuations in the economy put stress on planning and funding. Long term projections lose credibility in the face of short-term downturns. Politicians are as sensitive to criticism about overbuilding capacity as failing to anticipate demand.

Funding is a different problem. One source is local property taxes (Business Improvement Districts were installed with the change in Government in 2006). Rapid growth raises the demand for housing and house prices escalate again after the temporary lull of the early tens. Nevertheless even with rising personal incomes, public resistance to tax increases is strong as ever. Consequently, there is pressure to reduce or at least stagnate taxes, thus delaying large expenditures. This creates some planning problems.

Faced with these challenges, the planning authorities take two initiatives. One is to seek more regional funding. The other is to engage the public in the planning process. Both are successful.

Public Involvement

Strong public involvement and support exists in local communities. Local authorities, along with Government, recognise the need to engage the public in building consensus on major planning issues. New technology helps. For example, electronic local authority forums using the Internet become commonplace, the public are invited to interact and offer their opinions. There is a spirit of civic participation and desire for workable solutions among politicians and 'Joe Public', which supports effective consensus building, and helps to reduce the Nimbisim so ingrained in Irish people.

Cooperation -

The result is a new level of mutual respect; even trust, between Local authorities and between Local authorities and Government. Conflicts and controversies happen. No one agrees on everything. The traditional role of politics in resolving disputes remains. But the pressure from citizens to get things done, in cooperative and timely ways, drives the process. Local authorities and other bodies are able to work effectively in planning regional roads, agreeing on joint recreational facilities, ensuring compatible land uses at boundaries, funding regional services in an equitable and agreed way and minimizing duplication in the provision of services.

Clear and Balanced

Critical to this process is the clear definition of funding formulas, predictable decision processes; clear understanding of responsibilities and recognition of limitations. In this way, the region is successful in staying ahead of change, developing and implementing plans and maintaining a balance in taxes, services and rates of growth across boundaries.

2015 – Prosperity and Growth

By 2015, the Greater Dublin Area has changed significantly. Strong population growth has accelerated population to 2.7 million people. The built-up area has expanded outward dramatically. Rural-urban conflicts have periodically marred the local political scene. The regional road network has expanded beyond recognition. The major ring roads have attracted extensive industrial and commercial development. Distinct communities exist but their identities are less clear with the influx of people over the past 15 years. There is a high level of public engagement and cooperation across Local authorities in the region. The economy is strong and diversified and there is a sense of pride in the region and confidence in the future.

Wealthy but Forlorn

Summary

"**Wealthy but Forlorn**" is a future characterised by strong regional growth and uneven development across the GDA. Traditional industries (Tourism/ Manufacturing/Agri) expand, more technology-driven companies, emerge. The economy diversifies. Some companies compete globally but many are tied to the regional market. Jobs are numerous. Population grows. Incomes rise but disparities between rich and poor increase. Local authorities value their autonomy highly. They compete aggressively for funding and development. Efforts to coordinate development are ineffective and occasionally disastrous. Planning is always "behind the curve" and a hodge podge of development results. The Government, frustrated by the rivalry and lack of action, has to intervene frequently and impose solutions. A patchwork of communities develops with wide differences in service provision, tax rates (for waste management particularly) and infrastructure investment. Eventually, this state of chronic conflict hinders development and growth slows. By 2015 the Greater Dublin Area is a major economic region of 2.3 million people, broadly prosperous but with sharp differences across sectors in incomes, attitudes and identities.

There is an element of 'Ghettoisation' within the city centre particularly and some areas become 'no-go' after dark. Security becomes a major issue for the wealthy.

THE STORY

In **Wealthy but Forlorn**, strong economic growth creates prosperity and rising incomes despite conflicts and squabbles between local authorities and with the Government. Traditional industries sustain modest growth.

Diversified Economy

Building on these traditional industries, there is a tremendous expansion in high tech industries and businesses. Some businesses compete globally. Others are focused on the local market. Many provide services to or are spin-offs of traditional industries. A significant number are supported by Government to undertake and develop leading edge research and development. In turn, these firms create new companies to exploit and manufacture the new products and processes developed in the labs.

The result is a strong, diversified economy. Jobs are numerous, incomes are high, and the population expands as the GDA attracts people from across Ireland and Northern Ireland. Economically, the GDA is a growing and prosperous region.

Problems

These trends mask underlying social and economic challenges and sharp differences between local authorities. Not everyone, for example, shares in the wealth. Many are poor. Although unemployment is low, many jobs are low paying and unrewarding. Both the gap between the rich and poor and the demand for social services increase. At the same time the demand for new housing, new roads, new schools, new parks

and new water, sewage, electricity and communication lines increases. Public expectations are high. Demand for services is high. And pressure on infrastructure is high.

The relaxed immigration laws have led to a steady influx of Eastern European and African nationals. The city centre becomes colonised and ghettos develop. Race riots become increasingly common amongst the lower classes and security becomes an increasing issue. Crime levels rise in the city centre.

Identity + Autonomy = Conflict

Across the region, local authorities have a strong sense of identity and fight to maintain their autonomy. This creates severe difficulties in planning regional projects and systems. Initiatives to build or expand major roads and transportation links across the region are met with resistance. Efforts to coordinate water and sewage expansions are similarly frustrated as each authority weighs the costs and benefits differently and seeks to gain maximum advantage in any planning decision. This jockeying for position not only creates political friction but also effectively destroys timely planning and development. Reactive and fragmented planning dominates. In some cases, this allows developers to manipulate trade-offs between local authorities. In others, major roads are not built or maintained and repairs are uneven. Assigning blame is a major political activity. A hodge podge of development results.

Solutions Imposed

The Government views this disjointed and often chaotic situation with dismay and frustration. It is frequently forced to intervene either by arbitrating disputes or by directly intervening to impose solutions. This heavy-handed approach is strongly resented by local authorities but is often the only effective way to resolve impasses in the region. Lack of intervention is equally disconcerting. In some cases, non-intervention sends a mixed signal as the Provincial Government's roles and responsibilities in the region are inconsistent and unclear.

Despite these difficulties, major developments are implemented. Some developments, such as the system of major roads and link roads radiating from the centre, are imposed by the state. Extensions of the Luas LRT follow the same pattern. Others are locally supported but differ across local authorities. Some local authorities support low-density residential development. Others advocate urban renewal with in-fill housing to preserve communities and utilize existing infrastructure. Yet others focus on commercial and industrial development.

The Port stays and eats up even more land, the port tunnel is opened and traffic trying to get to and from the entrance is a nightmare, however the city centre traffic congestion is relieved.

Patchwork Quilt

The result is a patchwork of local authorities across the region varying in service provision, tax rates and infrastructure capacity. Local road maintenance is one visible sign of differences as potholes marking one community give way abruptly to smooth,

even pavement at the boundary to the next. Visible differences in the size, age and quality of housing, in the number and extent of parks, in the size, age and maintenance of recreational centres, in the frequency and cost of bin collections and commitment to recycling, and even in the responsiveness of staff to resident's problems and complaints, define the distinct differences and identities between communities. These differences are reflected in house prices and residents' perceptions. Residents identify with their community. Multiplied by the ghettoisation, some communities are seen as more desirable than others as places to live. This creates social divisions, which add to political differences in the region.

Growth Slowdown

Despite these difficulties, the regional economy prospers for many years. Eventually, however, the uncooperative environment hinders development and economic growth slows.

2015 – New Reality

By 2015, the Greater Dublin Area has grown to a population of 2.3 million people. It is a major region of economic growth Nationally. It is prosperous. Incomes are high on average. However, sharp differences exist across communities. With the slowdown in growth, the local authorities and Government face a new reality and there is pressure to change.

Co-operation

Summary

In "**Co-operation**" the future is characterised by modest economic growth and regional cooperation. Local authorities faced with limited resources find ways to cooperate and balance local and regional interests. Family and cultural values are strong. There is great pride in communities. Volunteers and community groups are an important resource in maintaining parks and recreation facilities, raising funds for local projects and building support for local initiatives. Slow but steady growth eases the pressure on development and helps long term planning. Local authorities focus on maintaining and upgrading existing infrastructure. To minimize costs local authorities share equipment and expertise and cooperate on regional projects. There is a "make-do" attitude. Local authorities realize that they cannot fund major projects on their own. For example, recreation centres that attract residents from several communities require joint funding and planning. Task forces are effective in coordinating and planning regional roads, water, sewage and communication systems particularly 'bandwidth' issues. The Government is supportive. By 2015, the Greater Dublin Area is an attractive, friendly, community-oriented place to live with a population of 2.1 million people.

THE STORY –

In **Co-operation** economic growth rates for the region taper off and stabilise at a modest level. Growth is steady and unspectacular as the traditional sectors of Dublin's economy slowly decline. Modest prices prevent large-scale development. City centre remains largely unchanged over the last 15 years except for the Millennium Spire, which now stands on O'Connell Street.

Unspectacular Growth

The strong government and economic base in the region proves highly beneficial. Government employment increases, albeit slowly, and rising expenditures support a host of service businesses. Health and education are growth sectors as an middle-aged spread in population combined with expensive medical advancements raise expenditures and create jobs. Education is also a growth area as college and university credentials are recognized as essential in an increasingly competitive and demanding economy.

Property Stagnation

The modestly growing but stable economy has major implications for local authorities. There is little pressure on housing and prices are stable. Demand for industrial and commercial development is low, although there is ongoing redevelopment and upgrading in these sectors, particularly commercial property. In general, however, the residential, commercial and industrial development markets are stagnant, the millennium residential boom a distant memory.

Necessity is the Mother of Cooperation

Lack of money, however, does not limit creativity. Local authorities and other government bodies recognize that to meet local expectations they must cooperate. They must adopt an attitude of doing more with less. They must be creative in managing budgets and funding capital projects. They must minimize duplication. They must work with their neighbours to improve efficiency. They must plan more effectively. And they do. There is a strong spirit of sharing as local authorities find creative ways to fund common recreation facilities, buy equipment together, coordinate water, sewage, electrical and communication upgrades – they dig up the street once instead of four times and coordinate work with their neighbours – create regional task forces to plan road expansions and regional services such as fire protection, Gardai services and ambulance services.

Community Values

Supporting these initiatives is a demanding but responsive public. Family and cultural values are strong. Politicians are expected to demonstrate neighbourly values and common sense decisions. While there is great pride in local communities, there is respect for other communities and cultural groups in the region. The Celtic Tiger brought with it a number of immigrants and the race problems of the early tens have been overcome by integration.

These strong underlying family and community values have two major impacts. The priority issues in communities are focused on quality of life concerns. Parks, recreation, safety, education and health are important. Jobs are important but not if crime rates rise or parkland is sacrificed. This occasionally creates controversy. Local business interests are frustrated by local councils in their efforts to modify/ change zoning restrictions.

Volunteer Power

Strong community values also open opportunities to expand the role of volunteers in the community. Volunteers become an important resource both locally and regionally. In local communities, a variety of new public service groups emerge. Some are formed with the assistance of local authorities but others develop from the grassroots on their own initiative. Community Groups, for example, take over the maintenance of local parks and children play areas. Sports groups provide volunteers to help operate and maintain recreation facilities. School initiatives involve students in projects to maintain cycle paths, clean up canal banks and waterways, plant trees, rake leaves and work in the community doing such things as assisting OAP's in their homes, working in with the homeless and distributing used clothing for the poor. The activities of these groups is widely publicised and praised reinforcing the strong sense of family values and pride in local communities.

These public initiatives are not limited to local communities. Similar efforts support regional projects. Prominent citizens take leadership roles in funding drives to support the arts, recreation and sports the aging Bono opens the new Irish Arts Centre in Smithfield. Regional fund raising for theatre, music and traditional Irish Dancing are highly successful, under the leadership of Michael Flatley.

Balancing Local and Regional Interests

These efforts reduce the pressure on local authorities. Although politicians are often actively engaged in supporting and coordinating these public-spirited efforts, direct government expenditures are minimal. Local authorities, as a result, are able to focus on maintaining and upgrading local and regional infrastructure and ensuring responsive government to meet public concerns. Regional projects and services are the most demanding, but local authorities realize they are all in the same boat. Regional planning efforts are scrupulous in balancing local and regional benefits and costs.

Government Support

The Government is an active supporter in building regional cooperation. The GDA is active in using public private partnerships, providing expert support and bringing all stakeholders together in constructive ways. The Government takes the lead in reducing duplication in regional Gardai services, fire protection and health in consultation with local authorities to ensure fair and equitable sharing of costs and responsibilities.

2015 – Co-operation

By 2015, the Greater Dublin Area is a region of communities, working together, sharing resources, coordinating development, fostering community involvement and supporting safe, clean and attractive areas for families to raise their children and OAP's to enjoy life. Like the economy, population growth has been slow and steady reaching just under 2 million by 2015.

Celtic Sloth

Summary

In "**Celtic Sloth**" the future is characterised by slow, jobless growth, deep regional conflicts and destructive rhetoric. Traditional industries are in decline, new business development is sluggish and Government activities face ongoing cutbacks as tax revenues decline.

The fall off in technology sector companies and the failure of our once sought after technology graduates to re-train has left the GDA reeling from a depressed market and a jobless future.

There is a push to centralise jobs and force activities into the downtown core – financial district/ CBD. With a stagnant economy, property prices fall and tax bases erode. Government is compelled to raise tax rates to maintain even the barest level of services. Social services are a priority but with rising unemployment, growing social welfare demands and increasing crime rates, there is not enough money to go around. Thus social services and physical infrastructure, most visibly roads, deteriorate. Local authorities try to build community pride and identity but with little effect.

By 2015, the Greater Dublin Area is a fragmented, declining region of 1.6 million people struggling to revive the past.

THE STORY

In **Celtic Sloth**, the economy is stagnant and fragile. The fall off in technology sector companies and the failure of our once sought after technology graduates to re-train has left the GDA reeling from a depressed market and a jobless future. Importation of the sought after skills, from Eastern Europe, in the early tens has left a sour taste in the Dubliners mouth. These immigrants are now viewed with distaste and a 'go-home' attitude by a region that can barely look after its own. The fall off in the construction industry, sees one major contractor (guilty of overtrading in the Celtic Tiger Boom) of the turn of the century declare bankruptcy leaving thousands unemployed.

This has led to areas of the city centre becoming ghettos, no go areas for a white catholic and even more pressure on local authorities to provide both education and religious teaching for these minority groups.

Emigration is once more the only option for our graduates; there is an absence of young people due to demographic factors, and the middle aged start to fear for their final years.

Health and education are critical sectors for the public attracting intense debate and controversy. The debate centres on the dilemma of whether to increase taxes or trimming expenditures and cutting services. Opposing sides are vocal in advocating their positions and successive governments swing back and forth as they try to navigate through these dangerous rapids. For the GDA, the long-term result is no growth in government jobs, flat national expenditures in the region and a distracted national government. All these developments limit the opportunities for new business development.

Property Market

For local authorities, stagnant growth has severe impacts. New house construction, for example, tapers off to a trickle. The underground economy flourishes and evading taxes becomes acceptable practice in society. House sales are sluggish and prices are flat or declining.

Regional Failure

The poisonous environment precludes any cooperation in regional projects. Despite the sluggish economy, there is still a need to repair and upgrade regional roads, sewage plants and water facilities, to coordinate regional communication and electricity corridors and to upgrade and build new parks and recreation centres. Most such developments die from lack of funding and lack of political will.

Imposed Centralisation

One major exception is the upgrade and expansion of the road system. Although the national government is overwhelmed by larger national issues, and tries to ignore local problems, transportation is one area that attracts attention. To promote economic efficiency and stimulate economic activity, the region pushes a plan to expand radial corridors and focus economic growth in the centre of the region. The decision is pushed through. The opposition comes as much from the heavy-handed process as the proposed outcome. Nevertheless, a regional plan focusing on a radial road system, encouraging high-density redevelopment and centralised services, notably hospitals, is implemented.

Rising Service Needs

With an eroding tax base and declining national funding for many services, individual local authorities are caught in a difficult situation. Although traditional funding is declining, the demand for services is increasing. Rising unemployment and growing social welfare needs put added pressure on the local authorities to provide social services. Public attitudes are mixed but broadly supportive of maintaining at least modest levels of social support. There is a view that local authorities must maintain support for the poorest and weakest in the community, especially during difficult economic times.

Higher Taxes

This puts Government in a financial box. They are compelled to raise taxes. Inevitably, even modest tax increases are met with vocal opposition. All expenditures are scrutinised in detail and fights between councillors create sharp divisions within local councils. Moreover, the added funds from tax increases are still inadequate. Stories of waste and inefficiency, errors by government staff in responding to public complaints and pictures of deteriorating roads – to name a few examples – highlight the local news. It is a trying time to be a local politician.

Loss of Pride

Nevertheless, some communities attempt to build on their history and sense of community to instil pride and confidence. Community awareness programs, clean up, programs and many other creative programs are launched. Some are successful in building community identity. Most, however, wither away as apathy undermines action. In many cases, the rhetoric falls on deaf ears and nothing happens.

An alternative strategy is to shift blame. The Government is a common target, but blaming other local authorities and other councillors is also practiced. In turn, TD's are quick to respond to "unfair" criticism and relationships deteriorate. It is evident that these destructive relationships cannot persist. The situation is not stable. Major changes seem inevitable.

2015 – Twelve years of horror.

By 2015, the Greater Dublin Area stands at a population of 1.6 million. A long period of slow decline and internal conflict has sapped the energy and vitality of the region. Local authorities are divided, there is little common ground and the region's best years seem to be in the past.

Appendix 1

Strategic Planning Guidelines for the Greater Dublin Area (Brady Shipman Martin et al. - 1999) Available from Dublin Corporation.

April 2000 Revision and Update of *Strategic Planning Guidelines for the Greater Dublin Area* (Brady Shipman Martin et al. - 2000)

National Development Plan 2000-2006 (Government of Ireland *Dublin Transportation Blueprint 2000-2006* (Dublin Transportation Office)

Dublin into 2000 Report (Dublin Chamber of Commerce) Concise overview of current economic and other trends in Dublin.

Dublin into 2000 (Dublin Corporation)

Dublin Docklands Development Authority - *Annual Report and Accounts 1999*

'Acceleration into Sprawl: Causes and Potential Policy Responses' (Brendan Williams and Patrick Shiels) in *Quarterly Economic Commentary June 2000* (ESRI)

Integrated Area Plans -: Liberties /Coombe (MIT MediaLab Europe locating in Guinness HopStore and the creation of a digital hub for Europe in this area).
O'Connell St. IAP - Ballymun Regeneration Ltd.

Park West Business Park

CityWest Business Park

Cherrywood Corporate Park

East Point Business Park

Commercial Property Reports from Estate Agents

Residential Property reports from Estate Agents

Appendix 2 Workshop 1 Attendees

Mr Noel	Brady	DIT
Mr Patrick	Shiels	DIT
Mr Brian	Hughes	DIT
Mr Tom	Dunne	DIT
Mr Henk	Van der Kamp	DIT
Mr Liam	Kelleher	CIF
Mr Tim	Brick	Dublin Corporation (Deputy City Engineer)
Mr Neil	Kerrigan	Enterprise Ireland
Mr Conor	Skehan	EIS Ltd.
Mr Michael	Cullinan	MV Cullinan Architects
Mr Felix	McKenna	Eircom
Mr Michael	Bannon	UCD
Mr John	Rogers	Respond!
Mr Andrew	McLaren	Trinity College Dublin
Mr Mark	Adamson	DDDA
Mr Michael	Donohoe	Colliers Jackson Stops
Mr Senan	Turnbull	Fingal County Council
Ms Linda	Conway	Dublin Corporation (Strategic Policy Manager, Dublin City Dev. Board)
Ms Elaine	Hess	Dublin Corporation (Strategic Policy Manager, Dublin City Dev. Board)

Appendix 3 Interviewees Listing

Tom Corrigan	DOE
Declan Martin	Dublin Chamber of Commerce
Tom Coffee	DCCBA
Finnean Matthews	National Spatial Strategy
Peter Coyne	DDDA
Liam Kearney	Enterprise Ireland
John Bruder	Treasury Holdings
John Fitzgerald	City Manager
Sean Carey	Asst City Manager Planning Dublin Corp
Philip McGuire	Asst City Manager Housing Dublin Corp
Mary Darley	Strategic Planning Guidelines

Appendix 4 Issues and Trends

	Economic
1	Changing economic fortunes over past decade
2	Political appetite for state intervention in provision of a range of income support schemes i.e. pension/social security
3	Substantial proportions of the Irish population are prepared to vote with their chequebook in response to the possibility of cheaper services in another Euro-currency country.
4	Growth in consumer spending.
5	Pattern of consumer spending shifting away from 'basics' towards 'luxuries'
6	Irish consumers are spending more money and time at home.
7	Cost of housing to buy
8	Cost of housing to rent
9	Levelling off of growth – impact on Built Environment of Dublin (downturn in construction)
10	Constraints on economic growth investment in infrastructure
11	Increase in gap between rich and poor
12	Fall off in public finance in Europe
13	Uncertainty of the Euro
14	Conflicts over social service and migration policies
15	Move towards labour un-intensive agri-activities
16	Demands of a global, communications saturated economy meaning that a growing proportion of the work force will work A-typical hours – shift/ week-end work becoming increasingly common
17	The role of trans-national companies
18	Industrial sector location will favour access to targeted customers with smaller plants in more places
19	Increase in disposable incomes
20	Impact of 'foot and Mouth'
21	Skills shortage – importing of trades from Continent to assist National development plan
22	Cost of Labour
23	Free trade / Competition
24	Centralisation (increasing) of and due to e-commerce
25	City as brand
26	City as centre of region
27	Erosion of fiscal case of government - transactions taking place on internet
28	Finite resources
29	Globally defined local economy – loss of local identity
30	Hinterland and City – supporting or supported by
31	Impact of IT on real economy of production
32	Ireland's need for economic catch is driving current day ad-hockery forward at the expense of longer term planning
33	Leisure, sport and culture as an economic driver
34	Paradigm Shift of economic base / taxation policy e.g. Transfer policy
35	Peripheralisation of Ireland in EU and Europe
36	Regionalisation supply and marketing not centered in Dublin – Part of our Market
37	Status of Dublin has changed moved from provincial to international status
38	Water Wars
39	Will Ireland become richer because Dublin grows –V- constrain Dublin + grown regions
	DEMOGRAPHIC
40	Ageing population
41	Increase in women's participation – transformation of working patterns among married couples, where both partners are in paid employment has more than doubled in last 10 yrs
42	Significant proportions of the population have no private pension plan

43	Overall population will grow by more than Euro Average due to above average birth rate, returning emigrants
44	World population growth - by 2015 7.2 billion – 6.1 billion in yr 2000.
45	Provision of health, education and leisure facilities
46	Increasingly mobile population
47	Growth of assisted, sheltered and independent living accommodation
48	Drop in number of young people in Ireland (low birth rate in 80/90's translates to lack of teenagers/ early twenties)
49	Labour force shortages getting worse?? Fall off in new entrants to workforce due to demographic trends shifting negotiating power to employees
50	Real wage increase – accelerated recruitment from women returning to workforce and returning emigrants
51	Affordable housing solutions an imperative
52	Early retirement, further exacerbating labour force shortages as 30+ 40+ decide to cash in nest eggs and retire by early 50's
53	Accent on 'middle class' values
54	People not companies determine location
55	Innovation and enterprise determine prosperity of urban areas
56	Flexibility of labour
57	Access to tertiary education by subsidy maintenance for socially deprived or excluded
58	Swedish Model – Children have more parents than parents have children
59	Split residency – between home and work between home and other home
60	Social exclusion and its implications
61	Number of houses increasing relative to population increase
62	Multi- Ethnic V's dominant immigration groups
63	Investment in Education / Housing / Ageing
64	Immigration and emigration
65	Emergence of a Dublin Super Region, expanding from City Centre
66	Demographics – Economics / Household size / ageing / immigration / Challenge of education / Political scenarios / Market led V's command / planning led
67	Consensus and consultation
	Cultural
68	Equality in the workplace
69	Equality in the home – especially with regard to financial decision making
70	Shake up in Irish 'job for life' mentality
71	Lack of employee loyalty
72	High rate of job change – people able to control such decisions
73	Professional accountability heightening
74	Professional standards increasing
75	Culture of competition in Ireland fiercer
76	House more than a home
77	Health an emerging sector
78	Future shock – backlash against so much change in a short period of time
79	Reassertion of traditional values and institutions – demand for more conservative social and economic policies
80	Lifestyle communities an emerging sector
81	Linguistic barriers
82	Advent of people working from home – in a non-structured environment
83	High rise development
84	Continuance of urban sprawl
85	Multi-national/ Multi-Ethnic Population
86	Ghettoisation of Dublin
87	Racism
88	Move away from traditional agricultural disciplines
89	Impact of Safety and Security on life in Dublin
90	Cultural positioning of united Ireland

91	Emergence of cultural attributes as a commercial product
92	Loss of Traditional Values
93	Manipulated consciousness
	Environmental
94	Sustainable development will be the watchword
95	Waste Management
96	Urban densities will increase
97	Urban densities will decrease
98	The Dublin Incinerator
99	Environmental quality of urban areas will be at a premium
100	Traffic congestion – effects on population (health)
101	Traffic congestion effects on Buildings (historic)
102	Sprawl into Green belt areas
103	Mixed use development will be more common
104	Transportation systems will determine the success of towns and cities
105	There will be less reliance on the private car
106	The private car will remain an icon
107	Optimisation of existing urban land use will be a priority
108	Fiscal measures for urban regeneration will be more popularly applied
109	Building on green-fields in the city (rezoning)
110	Regulations regarding emissions (Kyoto protocol)
111	Packaging and waste take back obligations
112	Recycling and Energy recovery from waste
113	Ireland failing to meet its international obligations in emission of nitrous oxide and Co2
114	Taxes and charges to discourage car use in urban areas
115	Accommodation de-coupling
116	Ensure adequate support services and infrastructure (e.g training, staff, money, facilities)
117	Encourage environmental collective action
118	Partnership arrangements between public and private sectors will grow - PPP
119	Government intervention in availability of childcare facilities so that women can return to work earlier
120	Debate regarding the roles of the state and the individual i.e the dominant political paradigm that the state should have an active part in the provision of a range of services and income support schemes
121	Controls on out-of-town development i.e. retail
122	Independence within European Union
123	Influence of independents / small parties
124	Influence of Europe
125	Policy determined by non-strategic issues
126	Falling tax levels
127	Collapsing prices in wake of Euro and technology fall off
128	Rise / Fall in statutory retirement age
129	Abolition of Statutory retirement age
130	Issue of increase water needs
131	Proposed Eastern Port access relief route
132	New Vehicular bridges across the liffey
133	The Dublin Bay project – sewage treatment works, marinas etc
134	North fringe Sewer works Project
135	The Dublin Port Tunnel Project
136	The LUAS project
137	The Regeneration of Ballymun and other IAP's
138	Concept of additional taxes (like hotel bedroom taxes) which operate successfully in other cities)
139	Dublin's lack of local finance raising capacity – a disadvantage compared to other cities

140	Lack of Fully Serviced Land
141	Implementation of Business Improvement Districts
142	Traffic Congestion
143	Administration fragmentation – Functional and Spatial
144	Construction as an excuse – especially over land and property right
145	Elected Mayor – a celebrity?. Local Authorities of the future being willing to cede some power to the Dublin regional authority
146	Entrepreneurial Planning – Special authorities / Agencies
147	Fragmentation of central institution of city government of capital
148	Geographical basis of governance
149	Increasing effective power of city and Co. managers
150	Increasing Entrepreneurialism in Governance – administration – Policy formulation – SPG – Consensus – Spatial – Local Access
151	New forms of local Government, comprehensive planning for small areas contradictions
152	Rate based planning
153	Spatial Hierarchy of Government and distribution of powers – National, Regional, Co. / Metro/ Urban etc
154	Subsistence – EU / National / Regional / County / Community
	TECHNOLOGICAL
155	Increase in the proportion of Irish Adults on-line – exercising their euro preferences
156	Genetic testing – advent of ability to predict future disease patterns/life expectancy
157	Revolution in information/communications – wireless technology
158	Fall off in trade skills due to new technology focus
159	New energy sources
160	Effects of IT on design/ construction of buildings/ environment
161	Breakthrough in materials technology – generation of widely available products that are multi-functional, environmentally safe, longer lasting and easily adaptable.
162	New technology centre in Liberties/Coombe area
163	Wide variations in market performance due to differences in technological capacity will appear
164	Biotechnology driving medical breakthroughs – enabling the worlds wealthiest people to improve their health and increase their longevity dramatically.
165	E is for everything approach – information and communication technology will be ubiquitous in our homes, workplaces and leisure venues
166	Smart materials

Appendix 5 Applications of Scenario Methodology

Applications of the scenario methodology abound; some examples are listed below:
A sample of subjects that have used scenarios are:

- Air transportation parameters
- Long-haul passenger demand
- Aircraft construction
- Shipbuilding in Portugal
- World petrochemical industry
- Off-shore industries
- European automobile industry
- The cosmetics industry
- The dairy produce sector
- Fairs and exhibitions in France
- Distribution of industrial products
- Distribution of electrical goods
- Demand for public transport
- Transportation modes in the Paris region
- Demand for environmental products
- Nuclear power sector
- French water networks
- Migration in the EEC
- Motivation of business executives
- The Three Valleys ski region, France
- The postal services
- Insurance sector
- The Bank of France
- Household consumption of banking products
- Videotex
- Geopolitical developments
- The Sahel region
- The Paris region
- The William Saurin company (agro-food)
- Aluminum
- Personal weapons
- Tourism and leisure
- Mail-order services
- Noise
- Power distribution networks
- Building
- Steel industry
- Banking
- Recreational equipment
- South Africa
- Transportation equipment
- Food processing
- Chemical industry
- Military
- Cement industry

A number of consulting firms utilise scenarios as an aid to strategic planning. These include:

- Charles Thomas and Charles Perrottet, The Futures Group, Glastonbury, Connecticut
- Clem Bezold, Institute for Alternative Futures, Alexandria, Virginia
- David Mason, Northeast Consulting Resources, Inc., Boston
- Stephen Millett, Battelle Memorial Institute, Columbia, Ohio
- Ian Morrison, Institute for the Future, Menlo Park, California
- Peter Schwartz and Napier Collyns, Global Business Network, Emeryville, California
- Joseph Coates, Coates & Jarratt, Washington, DC
- Michel Godet, Laboratory for Investigation in Prospective and Strategy, Paris
- Huges de Jouvenel, Futuribles International, Paris - Juanju Gabina, Prospektiker Erakundea, Zarautz
- Ute Von Reibnitz, Strategische Unternehmensberatung, Buchrain, Germany

Organizations that have or are using scenarios as a planning tool include:

- CRA, Australia
- Allied Irish Banks, Ireland
- E. I. du Pont de Nemours
- ARCO
- Pacific Gas & Electric, U.K.
- Shell International Petroleum Company, U.K.
- Prudential Insurance Company
- Amoco Oil Company
- Statoil, Norway
- AMAX, Inc.
- Electricite de France, France
- Datar, France
- Elf, France

Bibliography

African Futures. *A Methodological Guide to the NLTPS Process*. Abidjan, Cote D'Ivoire: UNDP, 1993.

African Futures. *Issue Identification: Phase I of the NLTPS Process*. Abidjan, Cote D'Ivoire: UNDP, 1993.

African Futures. *Probing the Future: Techniques, Tools and Methods*. Abidjan, Cote D'Ivoire: UNDP, 1994.

Becker, Harold S. "Constructing and Using Scenarios: An Aid to Strategic Planning and Decision Making." *World Future Society Bulletin*, September/October 1982, p.13.

Becker, Harold S. "Developing and Using Scenarios — Assisting Business Decisions." *Journal of Business & Industrial Marketing*, Vol. 4, No. 1, Winter/Spring 1989, pp. 61-70.

Becker, Harold S. "Scenarios: A Tool of Growing Importance to Policy Analysts in Government and Industry." *Technology Forecasting and Social Change*, Vol. 23, 1983, pp. 95-120.

Bell, Daniel (ed.). *Toward the Year 2000*. New York, NY: Houghton Mifflin Co., 1968. "Brief Case: Using Scenarios to Develop Technology Strategy." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.

Borouh, Mark A., and Thomas, Charles W. "Case Study: Alternative Scenarios for the Defense Industry After 1995." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.

Borouh, Mark A., and Thomas, Charles W. "Case Study: Defense Markets in an Era of Geopolitical Change." *The Planning Review*, May/June 1992.

Boucher, Wayne I. "Scenarios and Scenario Writing." In *Nonextrapolative Methods in Business Forecasting*. Edited by Jay S. Mendell. Westport, Connecticut: Quorum Books, 1985.

"Case Study: Twelve Scenarios for Southern California Edison." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.

Coates, Joseph F. "Scenarios Part One: The Future Will Be Different from the Present. What Do I Have to Do to Persuade You?" In *Nonextrapolative Methods in Business Forecasting*. Edited by Jay S. Mendell. Westport, Connecticut: Quorum Books, 1985.

Coates, Joseph F. "Scenarios Part Two: Alternative Futures." In *Nonextrapolative Methods in Business Forecasting*. Edited by Jay S. Mendell. Westport, Connecticut: Quorum Books, 1985.

Drucker, P. (1993) *Post Capitalist Society*. New York: Harper Business.

Esterhuysen, Willie. "Scenarios for South Africa: Instability and Violence or Negotiated Transition?" *Long Range Planning*, Vol. 25, No. 3, 1992, pp. 21-26.

Federal Energy Administration. *Project Independence Report*. Washington, DC: U.S. Government Printing Office, 1974.

Freeman, S. D. (ed.). "A Time to Choose." *Final Report by the Energy Policy Project of the Ford Foundation*. Philadelphia: Ballinger Publishing Co., 1974.

GBN (1999) *Scenario Planning*. London: Global Business Network Brochure.

-
- Godet, Michel. "The Scenario Method, From Anticipation to Action." *A Handbook of Strategic Prospective*, Chapter III, pp. 53-78, Paris: UNESCO, 1993.
- Godet, Michel; Bourse, F.; Chaupy, P.; and Menant, I. *Futures Studies: A Tool-Box for Problem Solving*. Paris: UNESCO, 1991.
- Godet, Michel. "Integration of Scenarios and Strategic Management: Using Relevant, Consistent, and Likely Scenarios." *Futures*, Vol. 22, No. 7, September 1990, pp. 730-739.
- Heydinger, Richard B., and Zentner, Rene D. "Multiple Scenario Analysis: Introducing Uncertainty into the Planning Process." In James Morrison et al. (editors). *Applying Methods and Techniques of Futures Research*. San Francisco: Jossey-Bass Publishers, 1983.
- IDON (1996) *Idons for thinking*. Perth. Milne, Tannahill & Methven Ltd.
- Institute for Futures Research. *Business Futures 1992*. Edited by P. H. Spies. Bellville, South Africa: University of Stellenbosch, 1992.
- Kahane, Adam. "Scenarios for Energy: Sustainable World vs. Global Mercantilism." *Long Range Planning*, Vol. 25, No. 4, August 1992.
- Kahn, Herman, and Weiner, Anthony J. *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years*. New York, NY: The Macmillan Co., 1967.
- Klein, Harold E., and Linneman, Robert E. "The Use of Scenarios in Corporate Planning – Eight Case Histories." *Long Range Planning*, Vol. 14, No. 5, 1981, pp. 69-77
- Kotler, P. (1997). *Marketing Management* (Ninth Edition). Prentice Hall, New York.
- Mandel, Thomas F., and Wilson, Ian. "How Companies Use Scenarios: Practices and Prescriptions." SRI International, Report No. 822, Spring 1993.
- Martino, Joseph. *Technological Forecasting for Decision Making*. New York: Elsevier, 1972.
- Meadows, Donella, Meadows, Denis, et al. *The Limits to Growth*. New York: Universe Books.
- Millett, Stephen M. "Case Study: Battelle's Scenario Analysis of a European High-Tech Market." *The Planning Forum*, Vol. 20, No. 2, March/April 1992.
- Millett, Stephen M. "Case Study: Los Angeles 2007." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.
- Saxena, J., Sushil, P., and Vrat, Prem. "Scenario Building: A Critical Study of Energy Conservation in the Indian Cement Industry." *Technological Forecasting and Social Change*, Vol. 41, 1992, pp. 121-146.
- Schoemaker, Paul J. H., and van der Heijden, Cornelius A. J. M. "Case Study: Integrating Scenarios into Strategic Planning at Royal Dutch/Shell." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.
- Slaughter, R. (1995). *Future Tools and Techniques*. Futures Study Centre. DDM Media Group, Melbourne, Australia.
- Schwartz, Peter. *The Art of the Long View: Planning for the Future in an Uncertain World*. New York: Doubleday, 1991.

-
- Schwartz, Peter. "Composing a Plot for Your Scenario." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.
- Simpson, Daniel G. "Key Lessons for Adopting Scenario Planning in Diversified Companies." *The Planning Forum*, Vol. 20, No. 3, May/June 1992.
- Stokke, R., Boyce, Thomas A., Ralston, William K., and Wilson, Ian H. "Visioning (and Preparing for) the Future: The Introduction of Scenarios-Based Planning into Statoil." *Technological Forecasting and Social Change*, Vol. 40, 1991, pp. 73-86.
- Taylor, C. W. "A World 2010: A New Order of Nations." U.S. Army War College, Strategic Studies Institute. Carlisle Barracks, PA, 1992.
- Taylor, C. W. "Eliminate Future Shock." *Chemtech*, July 1993, pp. 12-15.
- Taylor, C. W. "Alternative World Scenarios for Strategic Planning." U.S. Army War College, Strategic Studies Institute, Carlisle Barracks, PA, 1990.
- Tenaglia, Mason, and Noonan, Patrick. "Scenario-Based Strategic Planning: A Process for Building Top Management Consensus." *The Planning Forum*, Vol. 20, No. 2, March/April 1992.
- Van der Heijden, K. *Scenarios : the Art of Strategic Conversation*. Chichester : Wiley, 1996.
- Von Reibnitz, Ute. *Scenario Techniques*. Germany: McGraw-Hill, 1988.
- Wack, Pierre. "Uncharted Waters Ahead." *Harvard Business Review*, September/October 1985.
- Wack, Pierre. "Scenarios: Shooting the Rapids." *Harvard Business Review*, November/December 1985.
- Werner, Manuel. "Planning for Uncertain Futures: Building Commitment Through Scenario Planning." *Business Horizons*, Vol. 33, No. 3, May/June 1990, pp. 55-58.
- Whipple, W., III. "Evaluating Alternative Strategies Using Scenarios." *Long Range Planning*, Vol. 22, No. 3, June 1989, pp. 82-86.
- Wilson, Ian H. "Scenarios." In *Handbook of Futures Research*. Edited by Jib Fowles. Westport, Connecticut: Greenwood Press, 1978.
- Wilson, Ian. "Teaching Decision Makers to Learn from Scenarios: A Blueprint for Implementation." *The Planning Forum*, Vol. 20, No. 3., May/June 1992.
- Yergin, Daniel, and Gustafson, Thane. *Russia 2010: And What It Means for the World*. Random House, 1993.
- Zentner, Rene D., and Gelb, Betsy D. "Scenarios: A Planning Tool for Health Care Organizations." *Hospital & Health Services Administration*, Vol. 36, No. 2, Summer 1991, pp. 211-222.
- Ziemer, Douglas R. "A Decision Support System to Aid Scenario Construction for Sizing and Timing of Marketplaces." *Technological Forecasting and Social Change*, Vol. 42, 1992, pp 223-249.