

# C2020 Vision. The Future of the Australian Construction Industry?



# Structure of Workshop

- **What's it all about?**
- **What methods should we use?**
- **What have other countries done?**
- **What is our approach in Australia?**
- **Getting the discussion going.**
- **New Technologies**
- **Wrap up**

**This is NOT .... BOGSAT!!!**

**Bunch of Guys Sitting  
Around Talking!!**

# Why have a vision?

- Provides direction for what we do now
- Provides context for industry development
- Encourages the process of self improvement
- Benchmarks against other visions
- Enables a roadmap to be established
- Can unite the industry

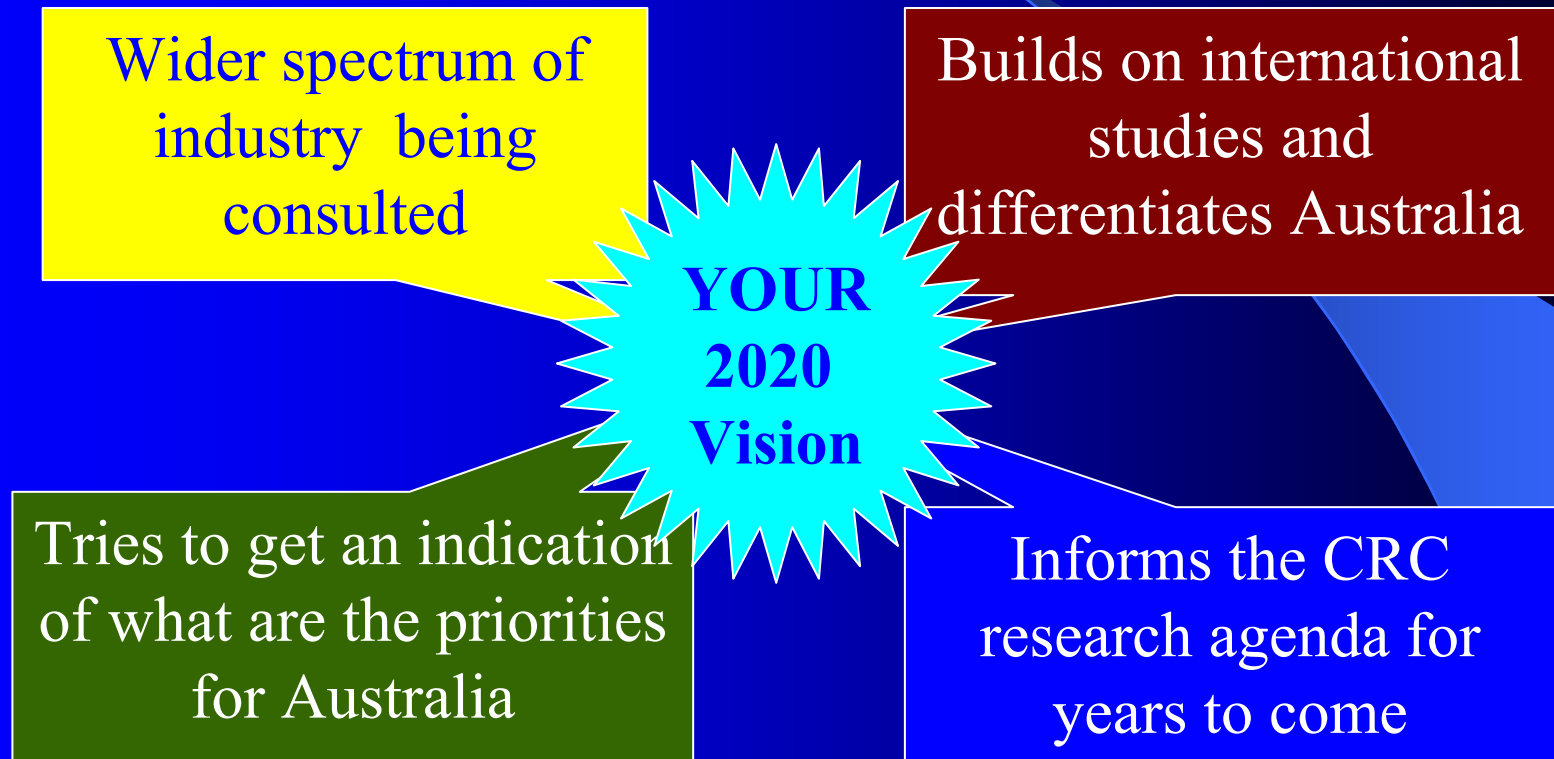
# C2020 Vision – building on ....

- NatBACC ; Building for Growth
- Australian Construction Industry Forum ;  
Innovation in the Australian Building and  
Construction Industry – Survey Report
- Construct NSW
- ACIF Guide to Integrated Project  
Procurement
- Many International studies in several  
countries

# ‘Building for Growth’

- Creating a more informed market place
- Maximising global business opportunities
- Fostering technological innovation
- Creating economically and ecologically sustaining sustainable environments
- Creating a best practice regulatory environment

# What's different about C2020?





What's  
different  
about  
Australia?







Head down  
Focus on  
the now

Solve the  
current  
problem

Existing mindset  
remains but  
prepared to move on

Extrapolate current  
trends

Baggage of the  
present removed –  
move on to what the  
industry should be

*Think out of the box!!*

< 5 years

< 15 years

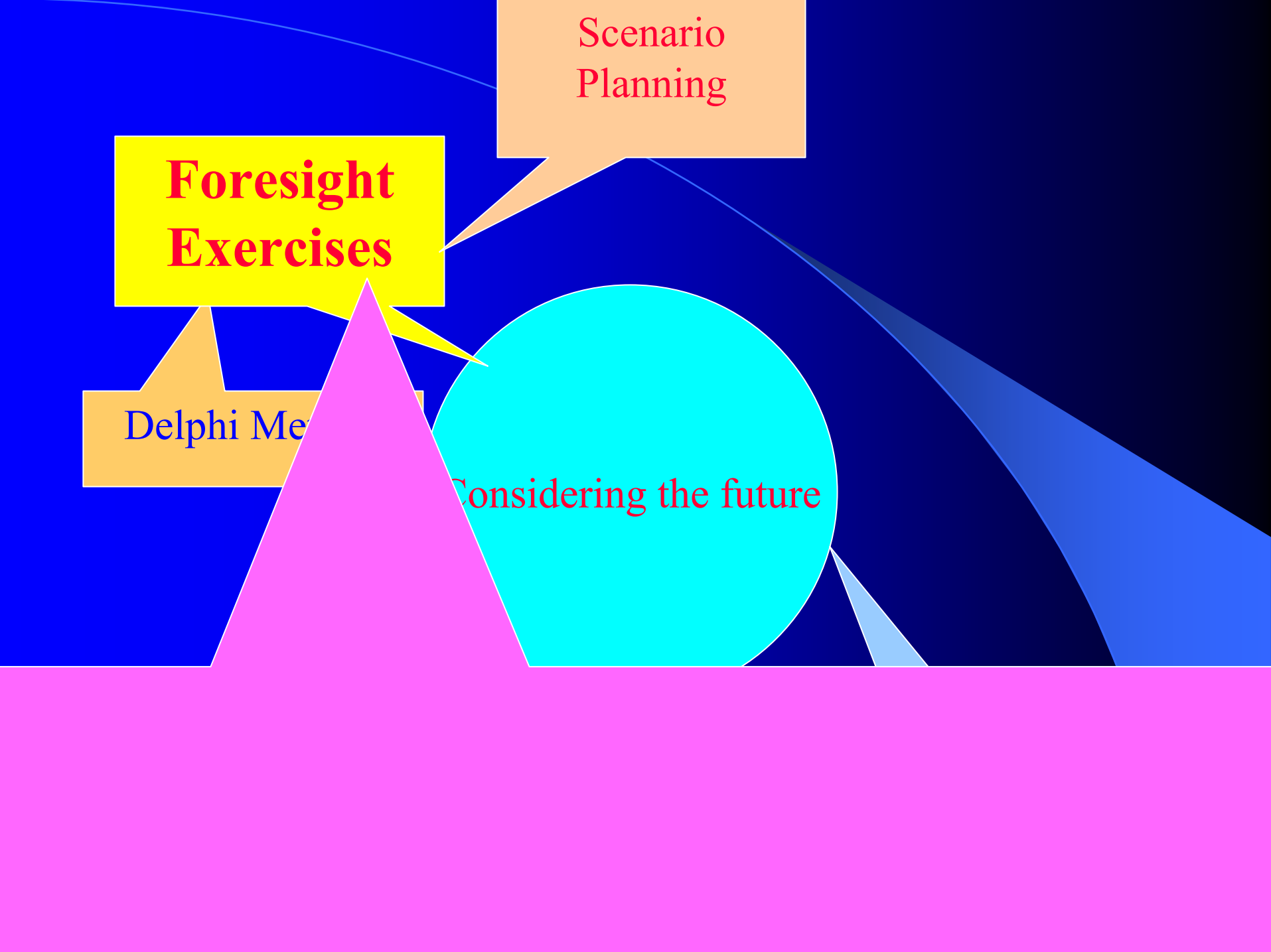
> 25 years

Scenario  
Planning

**Foresight  
Exercises**

Delphi Me

Considering the future



# Purpose

‘To predict the future , whether it is events, technological advances, or expected dates for their occurrence’

Delphi Method

Considering the future

Forecasting

Scenario  
Planning

**Foresight  
Exercises**

Delphi Method

Considering the future

**The future is  
inevitable and we  
just have to predict  
what will happen**

**We can influence the  
future – we are not  
helpless bystanders**

**Forecasting**

# Forecasting

Planner



Forecasting  
Method

Genetically  
grown houses

Extruded  
Buildings with  
laser cut out

Self healing  
buildings

Decline of the  
professions

Decision

How do  
I react  
to these  
?



# Foresight

Planner

Zero  
Defects

All  
Drawings  
use 3D model

Zero  
Carbon energy  
use

Supply chain  
On-line

What do we  
need to  
develop to  
achieve these  
goals?

Scenario Planning  
Process





Table 5.1 The countries undertaking Foresight studies – when and how

	Foresight exercises undertaken in:					Technique			
	1970-1980	1980-1985	1985-1990	1990-1995	1995-2001	Delphi	Critical techniques	Scenarios	Others
Japan									
Russia									
USA									
Germany									
Australia									
S Korea									
Philippines									
Netherlands									
N Zealand									
Italy									
France									
UK									
India									
Indonesia									
Canada									
Thailand									
Finland									
Hungary									
South Africa									
Nigeria									
Austria									
Ireland									
Spain									
Sweden									
Malaysia									
China									
Norway									
Portugal									
Latin America									
Czech Rep									
Denmark									
Latvia									
Estonia									
Ukraine									

Japan

Australia

UK

# Japanese foresight exercises 30 years on....

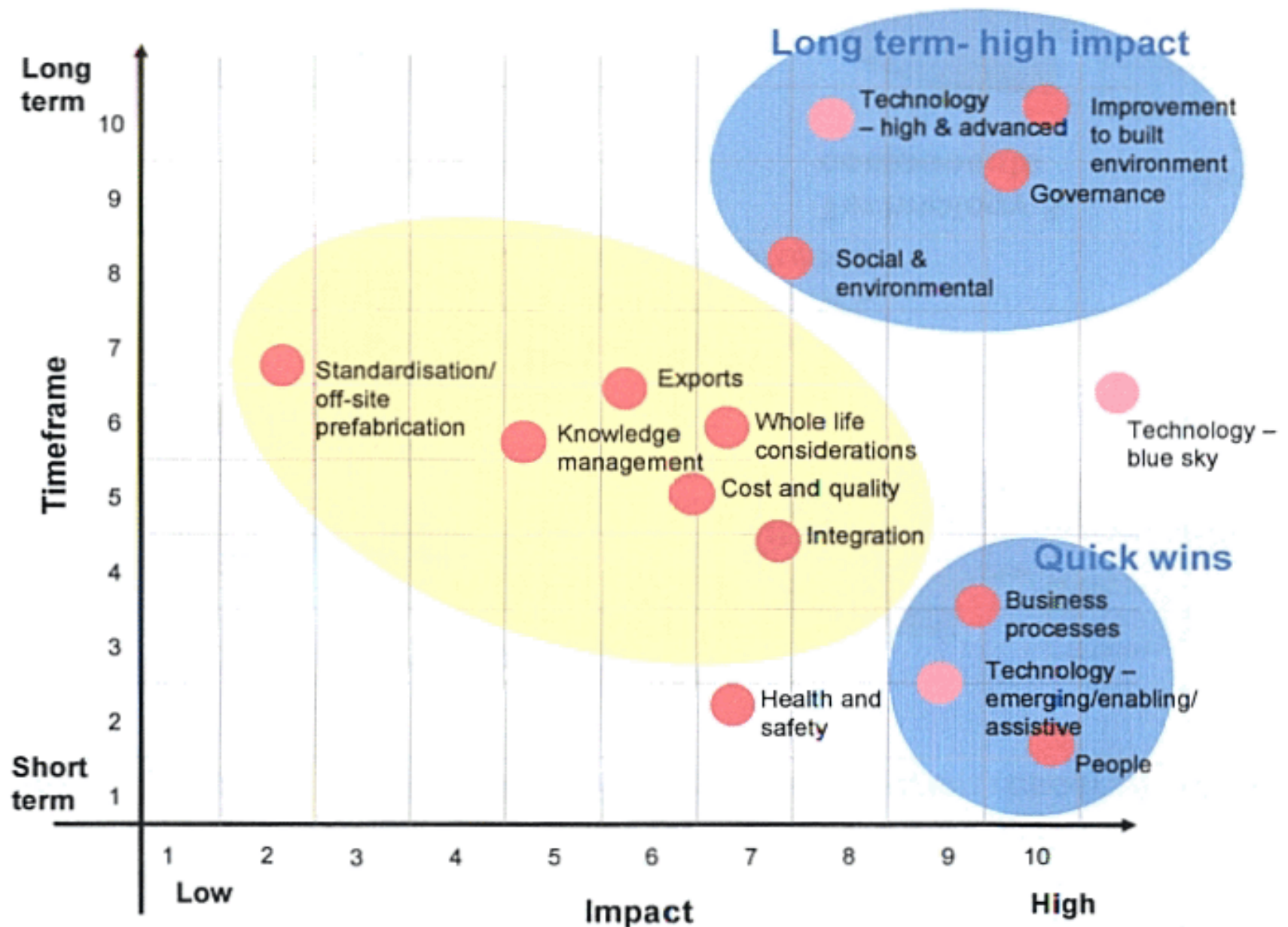
- 28% of the 530 topics in the first survey have been fully realised and 36% have been partially realised
- However ‘accuracy’ is not the important issue – consider Japans progress
- More important with the 1980s improvement culture

BUT DID THEY  
CONSIDER ASPECTS  
OTHER THAN  
TECHNOLOGY?

**Table 4.1** *The themes of construction strategies of nine countries around the world*

	Australia	Canada	Finland	France	Germany	Ireland	Singapore	Sweden	UK	USA
Globalisation	✓	✓							✓	
Innovation/R&D		✓		✓	✓			✓		
Exports/competitiveness	✓					✓	✓		✓	✓
Construction and production processes			✓		✓			✓		✓
Integration – processes & people					✓		✓		✓	
IT	✓	✓	✓		✓	✓		✓		
Repair & maintenance – existing stock				✓		✓			✓	
Procurement and project delivery	✓									
Service provider			✓							✓
People/workplace/culture	✓	✓				✓	✓	✓	✓	
New technologies		✓			✓	✓		✓	✓	✓
Environment/whole life/sustainability	✓	✓	✓	✓					✓	✓
Urban/city development		✓		✓						
Governance – codes and standards		✓								✓
End-user demands		✓		✓						

**Figure 1.3** The UK strategies in an impact-timeframe matrix



C20

Building on what has been  
done elsewhere

Trying to find out what is  
distinctive and different about  
the Australian Industry

What the Australian  
might be in 20 years time

- Partly a realistic 'wish list' and partly a forecast of  
the future
- Gain consensus around certain

Gauging views but not  
undertaking iterations

Seeking the views of the  
whole of the Construction  
industry and its clients

Believe them  
in each field but across the

# C2020 Vision

- Involves thousands from the industry
- Looks at possible scenarios
- Gauges timescales in part
- Is strategic in nature
- Looks for the key drivers for change
- Does not re-invent the wheel



# C2020 Approach



Trawl the  
world to see  
what others  
have done

Report by June 2004

Workshops  
to hear  
views of all  
the industry

Questionnaire  
to as many  
industry  
members as  
possible



# C2020 Questionnaire

Global Trends

Construction: Broad issues

Your Vision and aspirations for  
Australian Construction Industry

Your view of current forecasts for the industry

What are the barriers?

Anything  
different  
about  
Australia?

Your  
timescales

Foresight

Forecast

# Market pull and technology push

Where the winners  
are!

Technology Push

Too late mate!!  
You do not have the  
expertise to catch up!

Market Pull

It might be the early bird that  
catches the worm but the second  
mouse that gets the cheese!

# Drivers for Change?

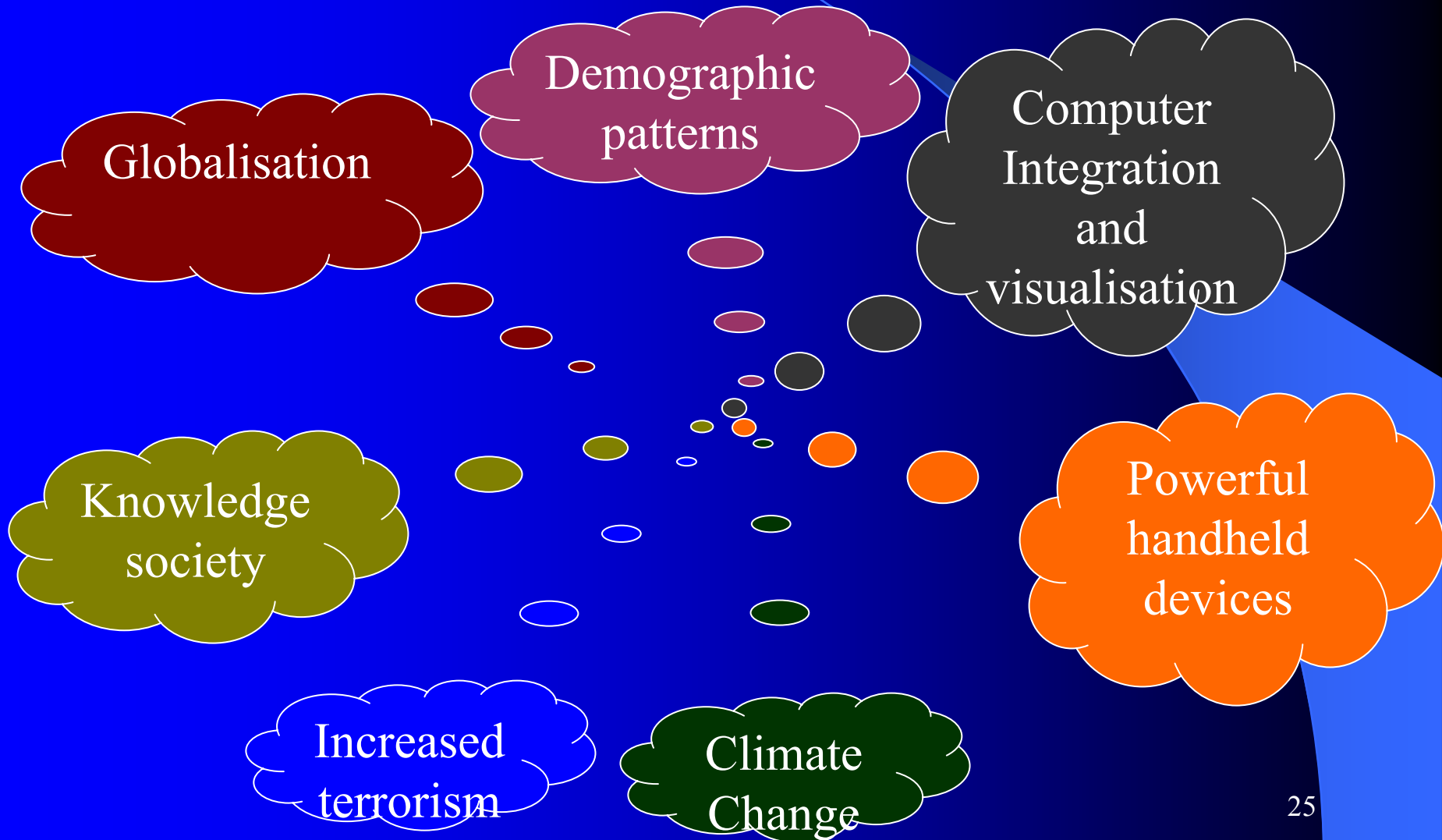
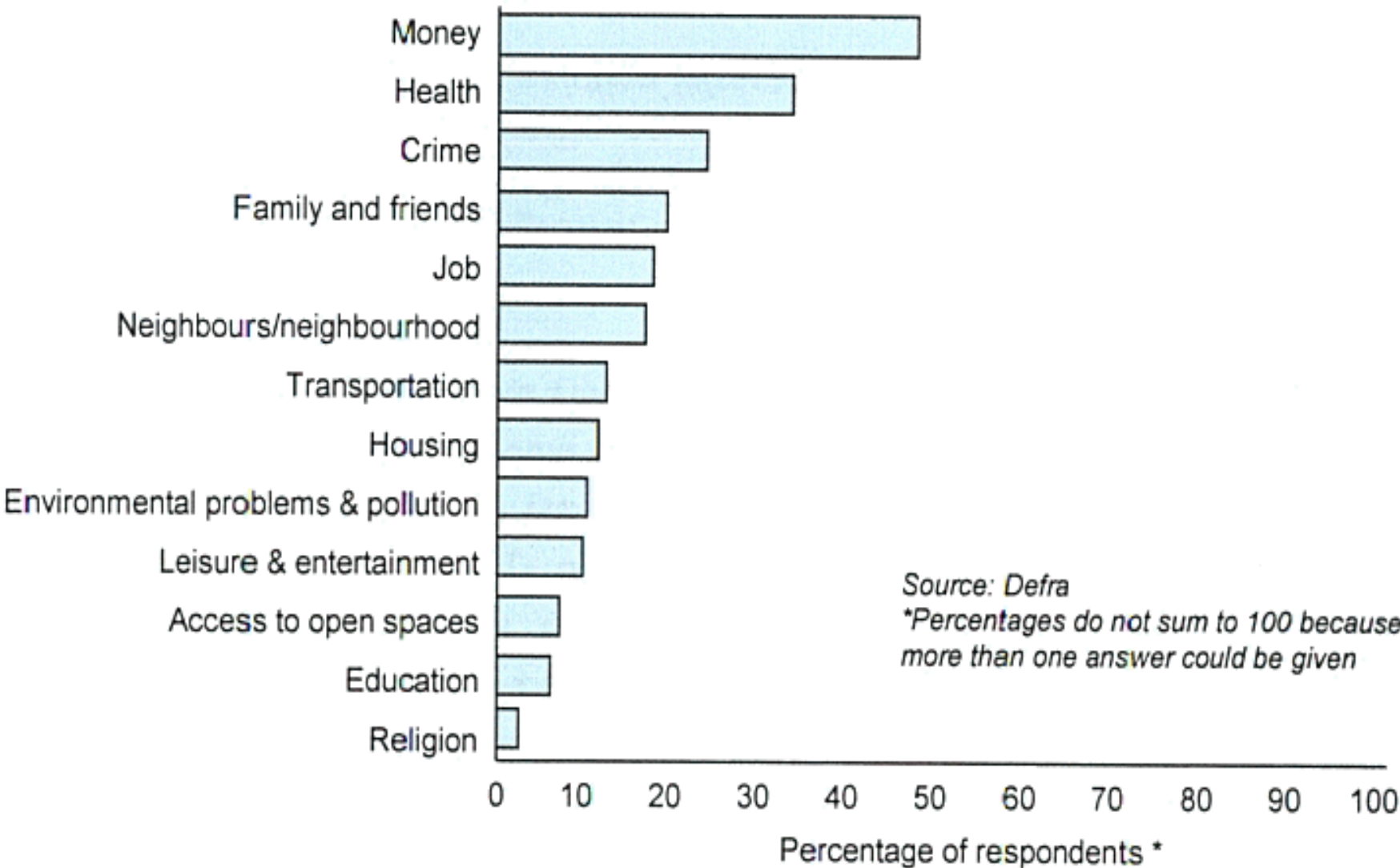
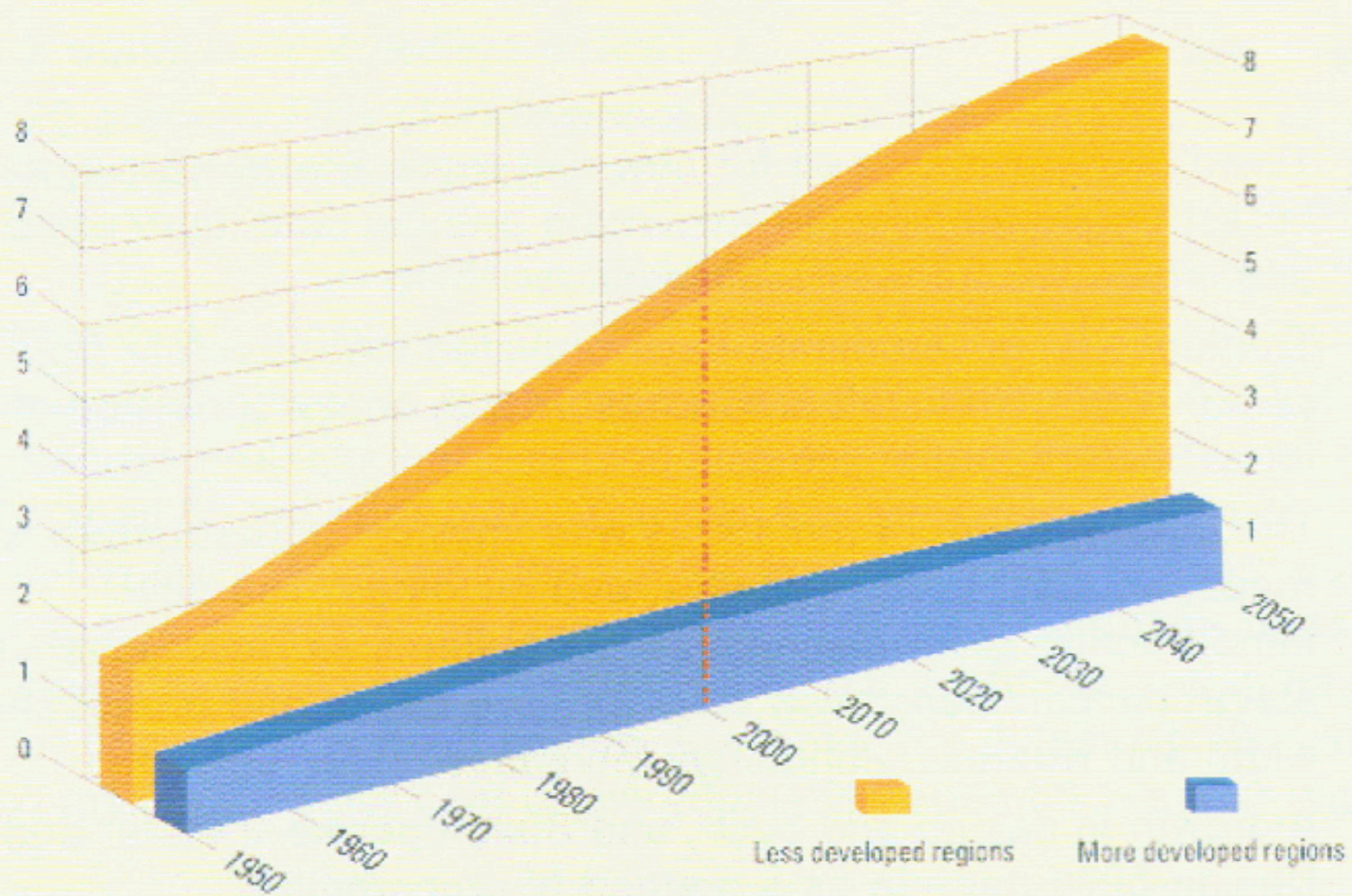


Figure 3.9      Survey of public attitudes to quality of life

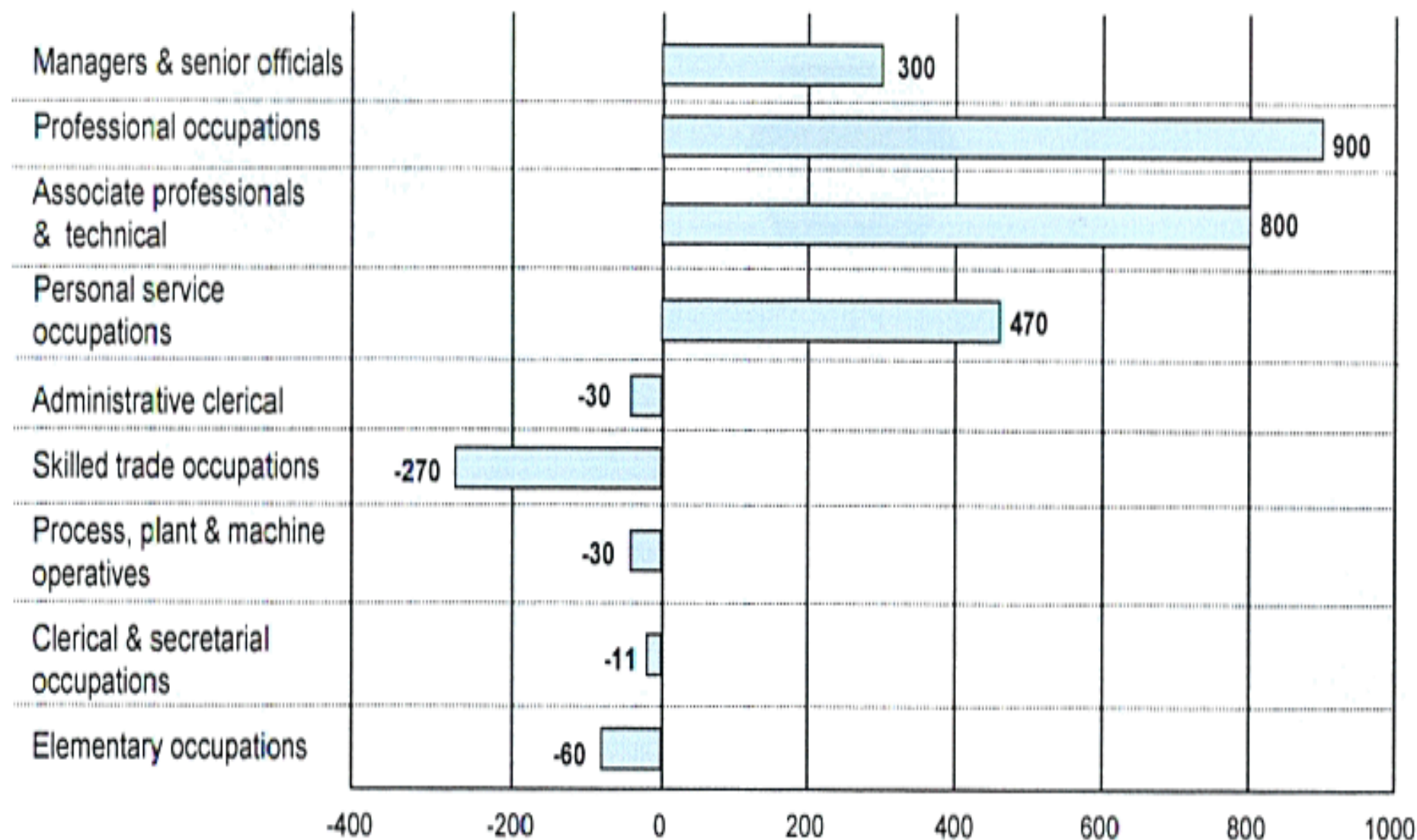


*Figure 4.1 Population growth up to 2050*



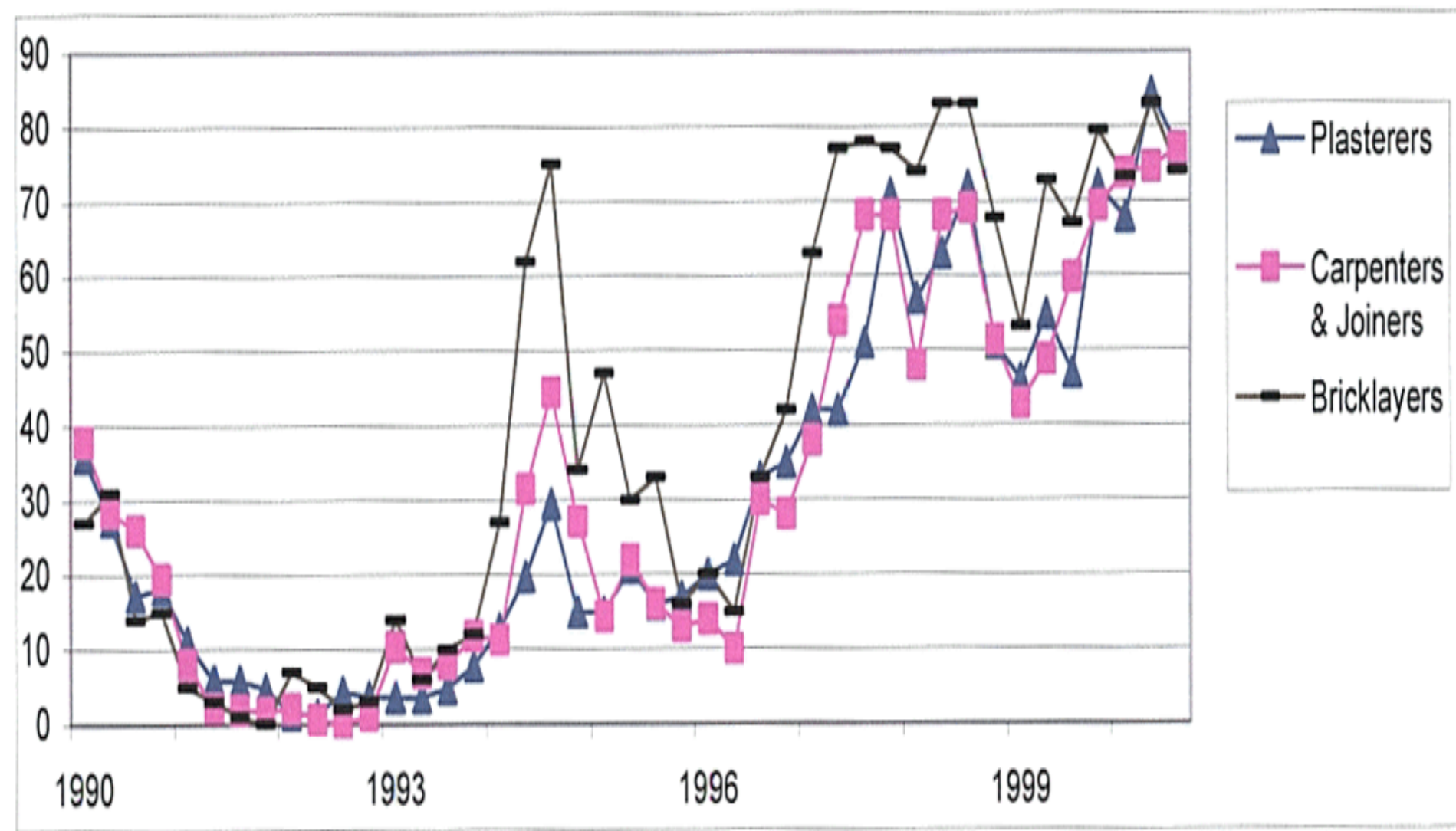


**Figure 2.1 Occupational Change, 1998 – 2009 (growth in thousands)**



Source: Wilson (2001) Ce/IER estimates F02F9 Forecast IN "In demand: adult skills in the 21<sup>st</sup> century, Strategy Unit, Cabinet Office

Figure 2.2 Labour availability (percentage of companies reporting difficulty) 1990-2001



Source: Construction Federation, 2002



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The end of Session 1 Presentation