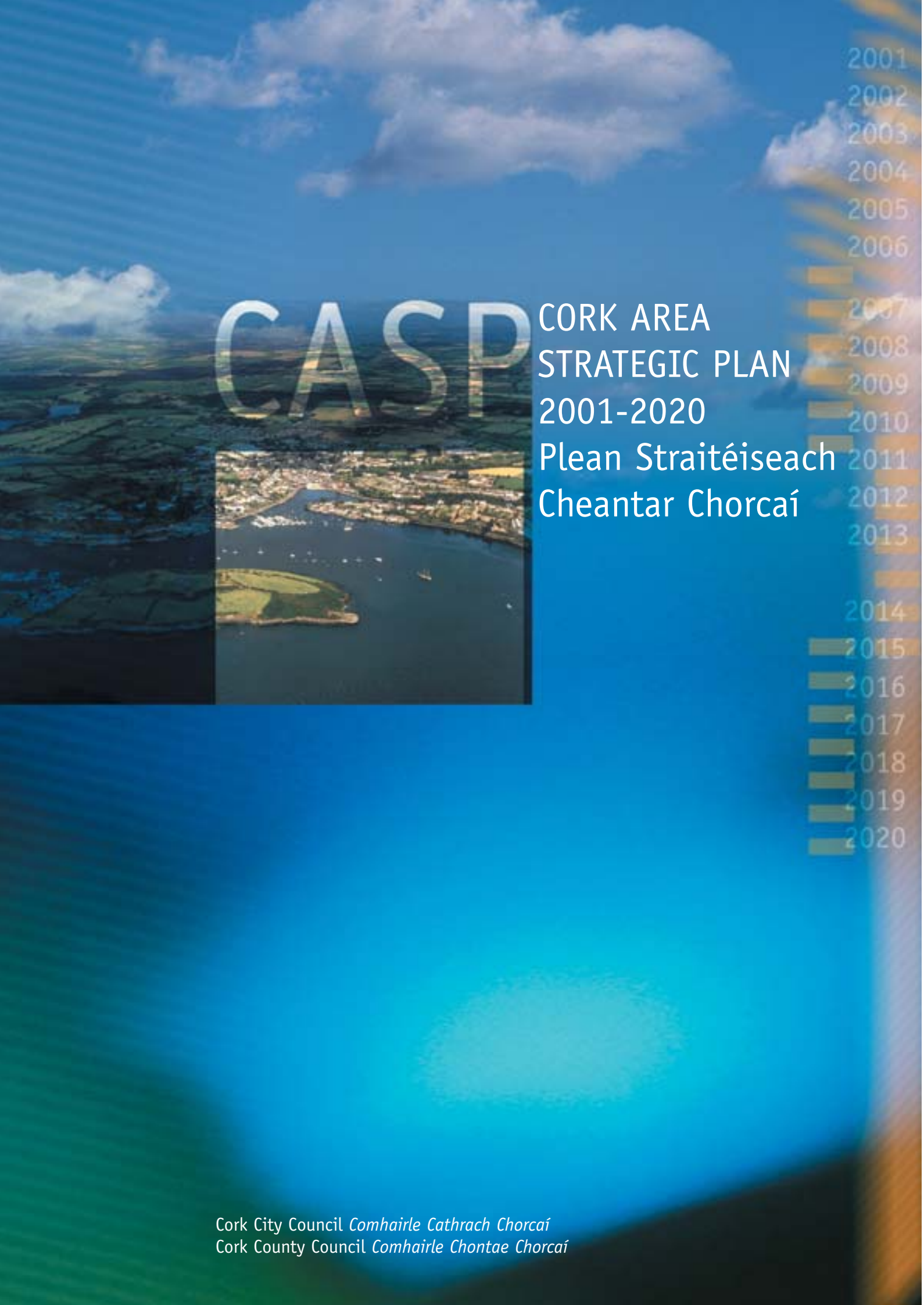

CORK AREA STRATEGIC PLAN 2001-2020

Plean Straitéiseach Cheantar Chorcaí

Cork City Council *Comhairle Cathrach Chorcaí*
Cork County Council *Comhairle Chontae Chorcaí*

Cork Area Strategic Plan (CASP) 2001-2020

Plean Straitéiseach Cheantar Chorcaí

The Cork Area Strategic Plan was Adopted by
Cork County Council and Cork City Council on 22nd October 2001

CORK COUNTY COUNCIL
COMHAIRLE CHONTAE CHORCAÍ

CORK CITY COUNCIL
COMHAIRLE CATHRACH CHORCAÍ

ATKINS
Villa Franca, Douglas Road, Cork

Cork Area Strategic Plan (CASP)

Prepared for

Cork City Council
Cork County Council

By a consortium of consultants led by

WS ATKINS

and comprising

Roger Tym & Partners
Brian Meehan & Associates
Jonathon Blackwell & Associates
Transport and Tourism Consult
Price Waterhouse Coopers

Acknowledgement
The Cork Area Strategic Plan is the result of an eighteen-month collaborative process of research and consultation involving not only the consultants team, the local authority officers and the elected members of all the local authorities but a whole range of stakeholders from industry, from education, from diverse representative organisations and from the voluntary sector as well as the general public in Cork.

It would be invidious to single out particular individuals or organisations for the part they played in the evolution of this strategy. However it would be remiss if the contribution made by the City Manager Mr Joe Gavin, the County Manager Mr Maurice Moloney, and their staff were not noted. In particular the sterling work of the Steering Committee under the chairmanship of Mr Dan Buggy and secretary Mr Ger O Mahony, in guiding this study was greatly appreciated. Similarly the considered advice provided by the Advisory Group greatly assisted the development of the strategy. Without their assistance the task of completing the study and harnessing the goodwill and energy of the people of Cork would have been a far more onerous task.

Jack Sheehan.
Project Director

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Building On Remarkable Strengths

The Cork Area Strategic Plan (CASP) was commissioned jointly by Cork City Council and Cork County Council in 2000 to provide a framework to enable Cork to become a leading European city region - globally competitive, socially inclusive and culturally enriched.

As a university city, home of the NMRC, one of the most advanced Information and Communications Technologies (ICT) Centres in Europe, and with its Institute of Technology – the region has unmatched research capabilities. Cork's unparalleled tradition of producing high quality graduates is one of the main reasons why it is home to 8 of the 10 leading global players in the Pharmachem sector and why it has become an internationally recognised centre of excellence for the ICT sector.

Cork has become a location of choice for modern industry and CASP will promote even stronger ties between inward investors and the educational institutions, to create a future economy which is knowledge-based and research led.

Cork is a designated gateway city under the National Development Plan 2000-2006, and CASP provides the mechanism that will promote Cork as a major national strategic growth centre for the next 20 years.

Because it is also a city of leisure and culture where the arts flourish, Cork has been selected as the European City of Culture in 2005, further emphasising its European significance and distinctive qualities.

The CASP also recognises the need to conserve the unique environmental qualities of the Study Area, including the many attractive towns and villages and the often superb landscape, particularly on the coast.

Spatially, CASP seeks to build on Cork's many assets, integrating land uses and transport, improving public transport and other infrastructure and developing the economic, social and environmental capacity of the area. It sets out to ensure that Cork is attractive to inward investment and will be able to reinforce its reputation as a centre of excellence, learning and innovation. In short, CASP's goal is the creation of a dynamic and progressive European City Region, which is a superb place in which to live and work.

Ag Treisiú na nDea-Thréithe

Bheartaigh Comhairle Cathrach Chorcaí agus Comhairle Chontae Chorcaí sa bhliain 2000 Plean Straitéiseach Cheantar Chorcaí (CASP) a choimisiúnú d'fhonn acmhainn Chorcaí a neartú le go bhforbródh sí mar cheann de mhór-réigiúin cathrach na hEorpa – cathair rathúil iomaíoch, cathair mhuinteartha fháilteach, cathair thréitheach ildánach ilchultúrtha.

Mar chathair ollscoile, baile dúchais an NMRC, ceann de na hionaid is mó cáil san Eoraip don Eolas, Cumarsáid, Teicneolaíocht (ICT) agus ar ndóigh an Institiúid Teicneolaíochta san áireamh leis, tá cumas agus acmhainní taighde gan sarú le fáil sa réigiún. Is é traidisiún an léinn agus na céimithe thréitheacha a chuirtear ar fáil i gCorcaigh is mó a mheall ochtar as deichniúr de mhór-chomhlachtaí cógaisíochta an domhain lonnú ann agus is é seo leis a chothaigh dea-chlú agus aitheantas idirnáisiúnta do Chorcaigh mar lár ionad chun feabhais san earnáil ICT.

Is í Corcaigh togha agus rogha lonnaíochta do thionscail nua-aoiseacha agus daingneoidh CASP an gaol idir an aos léinn agus aos infheistíochta. Rachfaidh sé seo chun sochair na heacnamaíochta nua a bheidh faoi anál an léinn agus faoi stiúr an taighde.

Ainmníodh Corcaigh mar chathair táirsigh faoin bPlean Forbartha Náisiúnta 2000 – 2006 agus is tríd an CASP a fhorbrófar agus a neartófar Corcaigh mar mhór-ionad náisiúnta fáis straitéiseach sna fiche bliain amach romhainn.

I bhfianaise a cáil mar chathair ildánach áit a bhfuil an léann, cúinsí cultúrtha agus na healaíona go léir faoi bhláth is ea a roghnaíodh Corcaigh mar Chathair Cultúrtha na hEorpa i 2005. Cuireann sé seo treise lena réim agus a céim Eorpach.

Tá aitheantas tugtha sa CASP don ghá atá ann le caomhnú a dheánamh ar thréithe sonracha na timpeallachta sa cheantar go háirithe na bailte agus sráidbhailte mealltacha agus áilleacht na dúiche máguaird go háirithe cois farraige.

Díríonn CASP ar threise a chur le hacmhainní agus dea-thréithe Chorcaí, iomlánú a dhéanamh idir usáid talún agus cúrsaí iompair, feabhas a chur ar chórais iompair phoiblí agus infrastrúchtúr eile agus forbairt a dhéanamh ar acmhainn eacnamaíochta, shóisiálta, agus timpeallachta an cheantair. Beidh CASP dírithe freisin ar a chinntiú go meallfar infheistíocht sheachtrach go Corcaigh le go mbeidh Corcaigh in ann cur lena clú agus lena cáil mar lár-ionad chun feabhais, chun léinn agus chun nuaíochta. I mbeagán focal, is é sprioc CASP Réigiún Cathrach Eorpach a chruthú a bheidh fuinniúil agus tosaíoch agus a bheidh ina thogha agus rogha dúiche chun só agus chun saothair.

Summary

Background To The Cork Area Strategic Plan (CASP)

The Cork Area Strategic Plan (CASP) is an initiative jointly sponsored by Cork City Council and Cork County Council in order to provide a vision and strategy for the development of the Cork City-Region up to 2020. It is in response to a Government supported European wide initiative to create a sustainable approach to social and economic development. This is encouraging planning authorities to take a more critical view of settlement patterns, development needs and infrastructure requirements through the preparation of strategic plans.

CASP sets out a broad brush strategy which aims to provide guidance as to the general direction and scale of growth so that the Cork City-Region can provide a high quality of life and opportunity for all of its citizens over the next 20 years.

CASP seeks to reflect spatial planning guidance that is emerging from initiatives such as the National Spatial Strategy (NSS) and the National Development Plan which encourages Gateway centres such as Cork to develop as the focus of successful and innovative regions. In particular, CASP sets out a framework that will enable the Cork City-Region to:

- Attain critical mass.
- Integrate land uses and transport.
- Make efficient use of investment in infrastructure.
- Provide a high quality environment.
- Improve the competitiveness and attractiveness of the region.

CASP does not replace the City and County Development Plans but will play a key role in the planning process by providing a coherent, long term spatial context, within which the more detailed statutory Development Plans can develop.

The Study Area

The CASP covers an area determined by a journey time of about 45 minutes from Cork City, an area that has been defined as the Cork City-Region. It includes Cork City, the satellite towns of Midleton, Carrigtwohill, Carrigaline, Ballincollig and Blarney and the Ring Towns and rural hinterlands of Bandon, Macroom, Mallow, Fermoy, Youghal and Kinsale.

Key Issues Addressed

Realising and Managing Economic Growth

The success of the economy of Cork is dependent upon attracting and retaining mobile investment and skilled labour. Capital, people and businesses with high growth potential will generally flow to areas endowed with a high quality of life, a skilled workforce and a vibrant social and cultural environment with good social cohesion, excellent physical infrastructure and ease of access. If Cork is to benefit from inward investment, retain existing businesses and realise its full potential it must safeguard, enhance and promote its outstanding assets – notably its people, environment, transport infrastructure, world class industries and educational establishments.

Regenerating the City

Cork City is recognised as the engine of growth for the region and its economic, social and cultural regeneration is crucial to the future success of the whole of the City-Region. Regeneration will provide a high quality environment, a good range of housing, leisure, shopping and new office and commercial uses. The city centre and the docklands will play particularly critical roles in revitalising the City and providing the location for many of the new uses, activities, and facilities that will be central to the regeneration process.

Summary

Sustainable and Balanced Development

- Car ownership is high in the study area, and the substantial growth of offices, industrial space, retail and housing in recent years has been largely planned and designed to accommodate motor traffic, thus increasing car dependency. As a result, the suburbs of Cork City and the Ring Towns are therefore more difficult to serve with public transport, and the provision of other infrastructure is also expensive at the low development density generally employed. More sustainable patterns of development therefore need to be provided.

- Furthermore, development has not been evenly spread, especially around Cork City. The great majority has been to the west and to the south of the City and little modern economic development has yet occurred in the Northside. This area contains a high concentration of social housing, and remains one of the few socially deprived parts of the CASP Area. The challenge for CASP is to redress the existing imbalances and to justify the provision and location of new development and infrastructure investment in a sustainable way.

Achieving Sustainable Development in the Ring Towns and Rural Areas

- Maintaining rural communities and supporting the rural economy are important objectives of the CASP but must be seen in the light of the fall in employment in agriculture and forestry and the development of commuter housing in the countryside. The challenge will be to avoid the development of the rural areas as suburbs for Metropolitan Cork and aim for employment-led growth of rural towns and the villages.

Creating an Effective and Environmentally Sound Transport System

- Cork has a high standard of road infrastructure but public transport has had little capital investment. This has encouraged dispersed development. The large forecast growth in population and the increase in incomes enabling higher rates of car ownership will only exacerbate this trend. Without a sustainable transport plan, it is forecast that traffic will:

  - double in 20 years.
  - peak hour travel speeds will fall to 5mph on most roads in the urban area.
  - travel times to work will become up to five times longer than at present.

- The provision of new roads is not the answer: it would be environmentally damaging and in many instances impractical.

The CASP Strategy

CASP proposes a more sustainable form of spatial development for the Cork area with the following key features:

- Improved access to jobs, education, health, culture, leisure and other services for all through the provision of a high quality public transport system.

- The location of new housing which will be situated as closely as possible to employment opportunities and public transport routes in order to minimize commuting.

- A move towards higher housing densities, and a wider choice of house sizes reflecting projected population structure. Development would be concentrated rather than dispersed, and coupled with the provision of high quality open space and recreational facilities. This will have a number of beneficial impacts, including lowering the per capita cost of new infrastructure, reducing the use of energy and the associated emissions of pollutants and greenhouse gases, minimization of the loss of agricultural land and slowing the current trend towards the suburbanisation of the countryside.

- Areas of natural and cultural heritage will be conserved and enhanced.

Table S1 **Key Plan Statistics**

	2000	NSS*	2020	Growth (%)
Jobs	155,000	8,000	210,000	55,000(+35%)
Population	345,000	17,000	440,000	95,000(+28%)
Households	110,000	6,000	166,000	56,000(+50%)

* Includes potential additional growth arising from the National Spatial Strategy

Summary

All of these measures should help create and enhance the quality of life and foster an excellent environment for future economic development.

It is estimated that a total of about 62,000 new dwellings will need to be provided in the study area over the next 20 years to meet the shortfall in existing housing provision and new demand (see Figure I). The new dwellings are distributed as follows:

- Cork City 12,000 (19%)
- Metropolitan Cork (excluding the City) 36,500 (59%)
- Ring Towns & Rural Areas 13,500 (22%)

Figure I **Cork Area Strategic Plan Diagram**

The Main Features Of The Plan

CASP is underpinned by six key concepts, these are:

1. **Regeneration of Cork City.**

- The city's role as the focus for the region will be strengthened and priority will be given to improving educational, health and cultural facilities and fostering the development of new service based industries and commerce. An additional 19,000 new jobs will be created in the city, reversing population decline and leading to the creation of 12,000 additional homes.

- Urban renewal will continue in the City Centre and will be spread to the inner city fringes. However the main opportunity for major development lies in the docklands area, as port activities gradually relocate. The area, which will include Horgans Quay and Kent Station and the south bank of the River Lee will be revitalized as a mixed use area providing employment, housing, shopping and leisure and recreational uses.

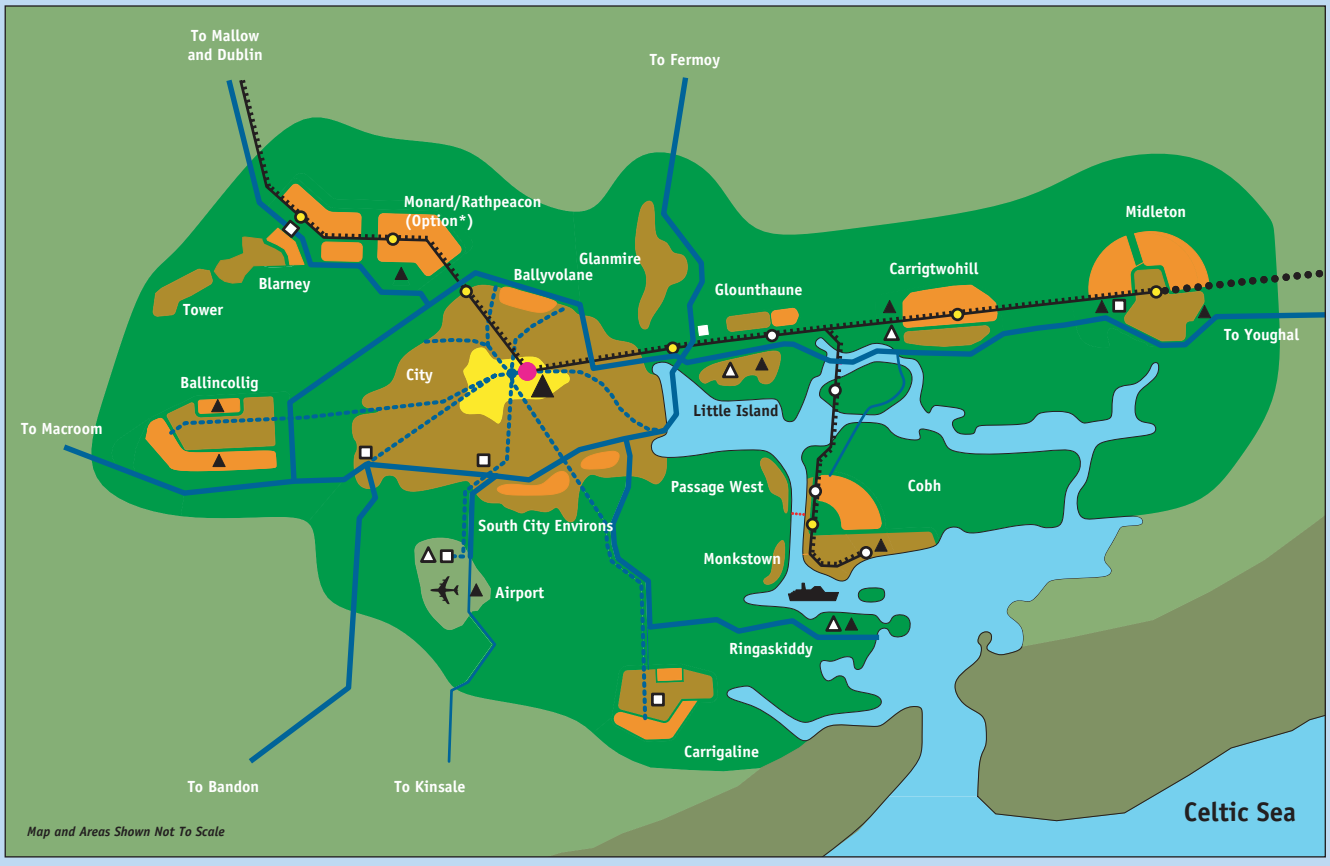
Legend

- Railway
- Potential Railway
- Future Railway Station
- Existing Railway Station
- Quality Bus
- Major Roads
- Minor Roads
- Park + Ride
- Future Employment Centre
- Existing Employment Centre
- Kent Station Interchange
- Port of Cork
- Cork Airport
- Rural Conservation Zone
- Coastal Protection Zone
- Green Belt
- Existing Settlement
- Possible Expansion Areas
- City Centre

This plan is NOT intended to be site specific and indicates possible broad locations for future development.

*Location of development will depend upon detailed rail corridor study

Figure II **Structure Diagram for Metropolitan Cork**



Summary

2. **Metropolitan Cork**

- Cork City and the settlements of Ballincollig, Blarney, Carrigaline, Douglas, Glanmire, Glounthane, Carrigtwohill, Midleton and Cobh, together with new development areas on the northern edge of the city will be developed as an integrated unit to be known as Metropolitan Cork. Metropolitan Cork will be characterised by a single jobs and property market linked together with a high quality rail and bus system and the social, cultural and educational facilities of a major European City. The identity and character of each town within the Metropolitan area will be protected through the retention of local services and the landscaped setting of each settlement. This will provide open space, woodlands and recreational facilities and wildlife corridors.

- The Metropolitan Area Structure Plan (See Figure II) envisages that growth will be based upon rounding off development growth on the western and southern edges of the City and developing the potential of the northern and eastern sides of the City by maximising the use of the existing rail corridor as a catalyst for the development of a fully integrated public transport system. The rail development is intrinsically and critically linked to the gradual shift of public and private sector investment towards the northern and eastern routes.

- An additional 29,000 new jobs will be created in Metropolitan Cork supporting an additional population, so that by 2020 it is expected that the overall population of the Metropolitan and City Areas will be over 300,000 people. This increase will require the development of over 36,000 new dwellings in the Metropolitan Area.

- There will be a major growth corridor in the northern and eastern part of the Metropolitan area between Blarney, Carrigtwohill, Cobh and Midleton, based upon and linked with the upgrading and re-instatement of the rail lines. The precise location of this development between Blarney and Midleton and its integration with new stations will be the subject of a detailed study which will include an assessment of development at Monard/Rathpeacon. The location of this growth along a key public transport corridor will help achieve greater social inclusion by improving access to public transport, jobs and services, amenities and a wider range of housing.

- In the west, Ballincollig should continue to grow, based upon its strengths as an employment and commercial centre, its attractive residential environment, and its proximity to the City, CIT, the University and the University Hospital.

- On the southern edge of the City, increases in housing provision in the early part of the Plan period will be possible by rounding off development in the southern City environs around Douglas. Further south in Carrigaline, development will be constrained by increasingly congested road access, although some expansion to the east and south of the town is planned, linked to the construction of two local relief roads around the town centre.

- An outline Cost Benefit Analysis has demonstrated the feasibility of the rail proposals and a more detailed study has been commissioned to examine in detail the development of the rail corridor, including the location of new stations in the Blarney/Monard/Rathpeacon/Kilbarry area and at Midleton and Carrigtwohill.

- Investment in re-opening of rail lines and improvement in train services and facilities is strategically linked to and dependent upon the related residential developments in the northern and eastern sectors as proposed in the Plan.

Summary

3. **Reinforcement of the Ring Towns and Rural Areas**

f The strategy for rural areas is to focus development effort upon existing settlements, particularly the Ring Towns, which are best placed to attract new investment and allow new development to be provided in a compact, sustainable form, easily serviced by public transport, utilities and social cultural and commercial facilities. Growth will be employment led, in order that the towns do not become dormitory suburbs of Metropolitan Cork, and housing will be phased in with the creation of new jobs.

f Mallow's population is expected to grow substantially over the next 20 years, reflecting its good road and rail connections and potential to attract new industry. Fermoy and Youghal will benefit from the provision of new bypasses and good road links and are also likely to grow strongly during the plan period. Population growth should also be strong in Bandon, although Kinsale will experience limited development since it is constrained by environmental and traffic factors. Macroom should be able to achieve sizable growth as a prestige service centre for the Gaeltacht area, particularly once the town is bypassed.

f Outside the Ring Towns, rural growth will generally be concentrated in existing villages in order to achieve sustainable growth and support existing or improved facilities. Cork County Council will develop a rural housing strategy to address the policy of rural housing.

4. **Infrastructure Led Development**

f CASP seeks to ensure that infrastructure, including transport and utility services, are provided in advance or in tandem with housing and other development. Implementation of the strategy is divided into a number of phases to ensure that development and infrastructure is provided in the most economical and efficient way.

f Investment in transport, water and wastewater infrastructure is forecast to total €2billion by 2020. This infrastructure will be paralleled by investment in other economic sectors both public and private.

5. **Creation of an Integrated Transport System**

f The creation of an integrated transport system is central to the whole CASP development strategy and is based upon the completion of essential strategic road links, the development of a suburban rail network (including the restoration of former routes) and a high quality bus network, supported by Park and Ride facilities and improved cycle and pedestrian networks. Major Proposals include:

- Development of a North West Link from the N22(Cork –Killarney road) to the N20 (Cork-Limerick road) and N8 (Cork-Dublin road) and improvements to other routes;
- New suburban rail services between Blarney and Carrigtwohill & Midleton and Cobh via the City Centre, leading to a ten fold increase in rail travel by 2020.
- Redevelopment of Kent station as a key transport interchange between rail, bus, taxi, and linked by pedestrian and cycle routes to the City Centre and Docklands.

Summary

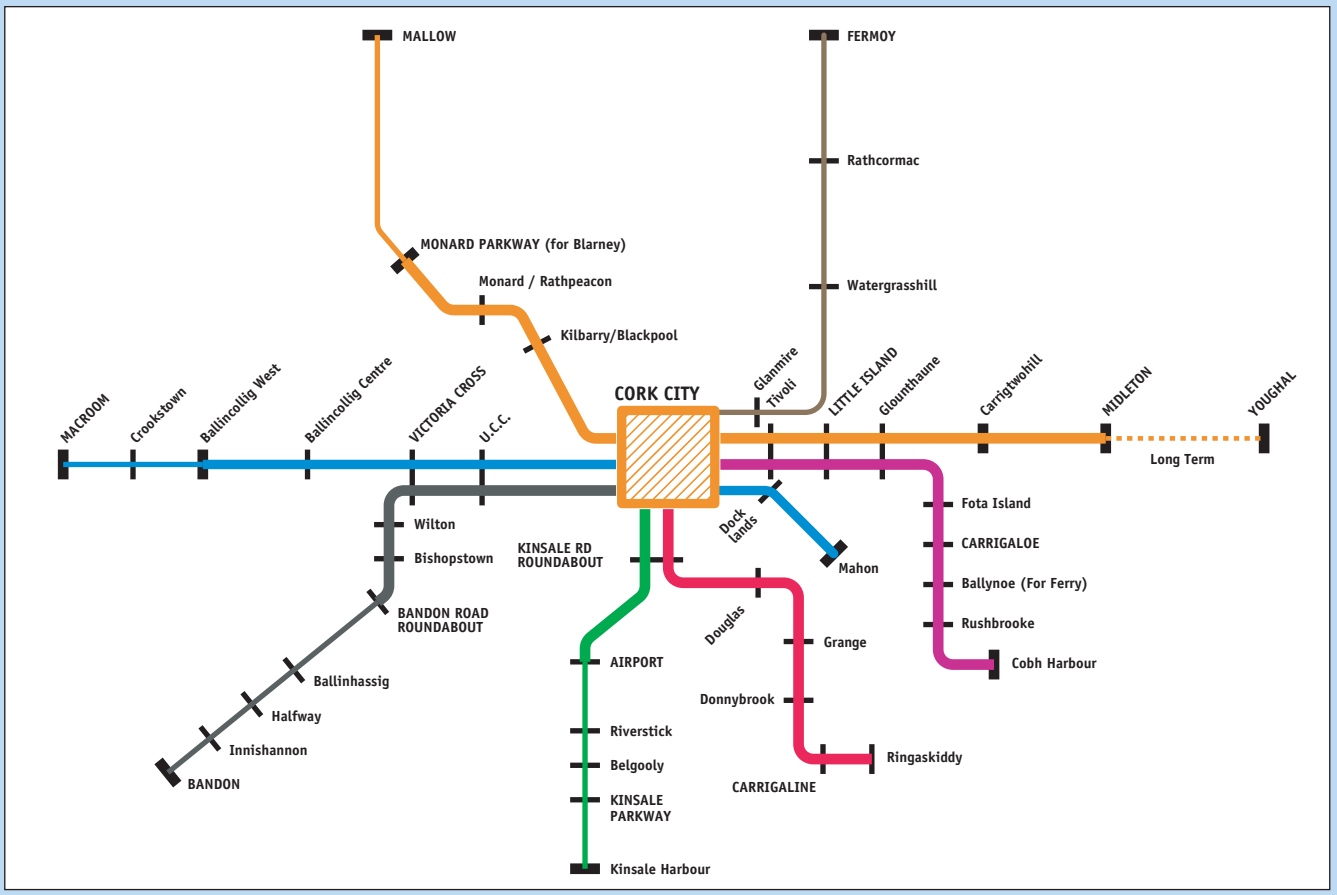
- Green routes, featuring quality bus corridors and improved provision for cyclists and pedestrians. These will focus on the main radial routes from Cork City, notably to Ringaskiddy via Douglas and Carrigaline, the Airport and Kinsale, Bandon, Macroom, Fermoy and Ballincollig to Mahon via the city centre and the Docklands.
- Park and Ride facilities linked to the new rail services and quality bus corridors.
- Expansion of the Airport and improvement of access to European air transport hubs.
- Continued improvement and rationalization of Port facilities.

f The development of a high quality, 'state of the art' public transport system is central to the achievement of an Integrated Transport System for Cork. (see Figure III)

f The immediate strategic objective of the integrated transport system is to create conditions that will facilitate a change in public attitudes towards the use of public transport. This is seen as a strategic necessity not only for reasons of environmental sustainability, but also to be able to accommodate the growth in demand for transport that accompanies economic growth and expansion.

f The public transport strategy will result in 19,000 fewer car journeys being made in the peak hour in 2020 than would otherwise have been the case. There will be a significant shift from car based transport to public transport which will see growth on the rail network increase 17 fold from 439 trips to 7,600 in the morning peak hour in the upgraded system. There will be a modal shift to public transport of up to 30% of all trips going to or coming from the City Centre.

Figure III **Schematic Public Transport Map for Cork in the Year 2020**

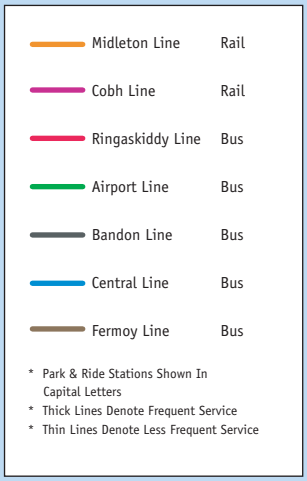


6. **Protection and Enhancement of the Environment**

f The attractive landscape of much of the study area, areas of nature conservation importance, the quality of the streams and rivers, and the archaeological and architectural heritage should all be conserved for future generations. The CASP recognizes that they are vital component of a high quality of life for the population, and as an attraction to visitors and investors. Proposals include:

- The identification and designation of additional areas for nature conservation.
- The development of river catchment management plans.
- The preparation of a coastal zone management plan for the study area.
- A landscape character assessment of the study area.
- The designation of conservation areas.
- The creation of new woodlands of native and broad-leaved species and trees.

Legend



Implementing The Plan

f Implementation is central to the success of the CASP, and there are a number of critical activities to be undertaken including:

- International marketing of Cork.
- Establishment of the institutional mechanism for implementation, including a dedicated CASP office.
- Funding, including private sector involvement.
- Regular Monitoring, including a comprehensive mid term review.

f Having set the broad planning strategy, the detailed planning of the study area will be the task of the City and County Development Plans and Local Action Area plans which will be prepared for the new and expanded development areas.

The successful implementation of CASP will require Cork County and City Councils to work together in partnership, supported by funds from the National Development Plan and the National Spatial Strategy, together with private sector funding, to deliver the infrastructure and development proposals of the Plan on time.

This partnership approach and prompt delivery of infrastructure will enable Cork to compete more effectively as an attractive alternative location for inward investment both nationally and internationally and will ensure that the region develops in an integrated and sustainable way for the benefit of all its citizens.

1: Introduction

1.1 Study Background And Aim

Cork County Council and Cork City Council jointly commissioned the Cork Area Strategic Plan (CASP) Study in Spring 2000, calling for a fresh examination of Cork's identity and potential. The aim is to deliver a change in approach to meeting Cork's aspirations, an approach that has a strong emphasis on socio-economic and environmental sustainability and which makes the best possible use of Cork's natural advantages.

The Cork Area Strategic Plan will provide a framework and process for the full integration of land use, transportation, social, economic and environmental elements for the Cork area to 2020. The end product of this process will be a strategic plan with an attendant monitoring procedure sufficiently flexible to adapt to change over time, and in a spatial planning context be independent of the rate of economic growth - that is to say, the Plan will propose to give guidance on the location of growth whenever it might occur.

A glossary of terms used in this report is set out in Appendix A.

1.2 Study Area

The Plan covers Cork City and its immediate area of influence, so the Study Area (see Figure 1.1) radiates out from the City to include the Ring Towns of Kinsale, Bandon, Macroom, Mallow, Fermoy, Youghal, and the satellite towns closer to the City including Cobh, Passage West, Carrigtwohill, Midleton, Blarney, Ballincollig and Carrigaline.

1.3 Key Development Issues Facing Cork

The Cork City-Region faces a number of significant challenges over the next 20 years, as the scale and pace of change quickens. How these challenges are embraced and managed will determine whether the City-Region can be developed in a sustainable manner. The key issues that will need to be faced are:

Realising and Managing Economic Growth
Mobility of foreign investment and people is at an all time high. Competition to attract mobile capital and skilled people has never been fiercer, evidenced by over 1,500 promotion agencies and several thousand local authorities in Europe alone, each promoting their location as a place to invest.

Figure 1.1 **The Study Area**

Capital and people with solid innovative capacity and high growth potential generally flow to areas endowed with an intangible infrastructure of quality of life, social cohesion, skills and know-how, as well as excellent physical infrastructure and a demonstrable ability to adapt to a changing environment.

Within this market context, the Cork City-Region must strengthen its ability to respond to change, and demonstrate an eagerness for innovation and diversity. The Cork City-Region has outstanding assets - its people, environment, port and harbour, world class industries and education. It has no shortage of developable land on both brownfield and greenfield sites. Yet there is an impression that the full potential of these advantages has not been realised and that Cork is "punching below its weight". The challenge is for the Cork City-Region to build on its undoubted strengths and move the threshold of its ambition. This will involve commitment to developing projects of a truly international standard within a framework of socio-economic and environmental sustainability. It must then market this ambition in the global marketplace.

Legend

To succeed, this development will need to embrace all parts of the City-Region -including the City, the suburbs and satellite towns that make up Metropolitan Cork, and the Ring Towns and their rural hinterlands.

Regenerating the City

Traditionally, the City has been the economic driver of the Region and a strategic asset for the wider Study Area. Like other historic cities in Europe, Cork's physical fabric needs sustained and substantial investment to conserve its heritage and rebuild significant areas of under-used or derelict buildings. City regeneration will release a host of shopping and leisure opportunities, and enable Cork City to retain its natural position at the top of the hierarchy of its suburbs and other regional cities. Modern, information technology-compatible business space is urgently needed in the City, as it is losing employment to the suburbs where such space is available. A lively mix of new uses, including high quality city centre housing will be needed to reverse the modest but gradual recent loss of the City's population.

Cork City has more than enough potential to meet development needs and is working hard to regenerate itself. The award-winning URBAN Pilot Project 1994-98 is an early result of these efforts. A scheme is underway for Patrick Street, the City's main thoroughfare, which represents the best in current European design. Ample exciting sites exist within the City centre and on its fringes, and their redevelopment needs active encouragement. The City Council is now about to tackle a major, but longer term opportunity - the redevelopment of the City Docks. This project will help to consolidate Cork as a European location for enterprise and significantly contribute to the continued regeneration and commercial life of the City. The development of the Docklands will benefit from the support of the Port of Cork, the County Council, CIE and other local stakeholders.

Balancing Development in Metropolitan Cork

There has been a growing imbalance between the development of the city and its surrounding suburbs and satellite towns. Car ownership is high in the Cork sub-region, and development has been planned and designed to accommodate car transport. The suburbs are therefore more difficult to serve with public transport. Provision of other infrastructure is also expensive at the low development density generally employed. Additionally, the surrounding countryside is disappearing and the Green Belt around the City is being degraded. Extensive development is not limited to the edge of the City. In the year 2000 alone, Cork County Council granted 2,300 applications for isolated, once -off housing in the countryside. This is partly because, as in the rest of Ireland, housing is both scarce and expensive in the Metropolitan Area.

1: Introduction

Development in the last 20 years has not been evenly spread around the City edges. The great majority has been to the west and to the south in an arc that includes the third level education institutions, the hospital, the airport, the port at Ringaskiddy and the towns of Ballincollig and Carrigaline. More recently, development is occurring to the east of the City at Little Island, Carrigtwohill and Midleton. Little modern economic development has yet occurred in the Northside of the City, which has never fully recovered from major factory closures some 20 years ago. It contains a high concentration of social housing and pockets of social deprivation in what is otherwise a generally prosperous Study Area. Similarly, parts of the County to the North of the City are relatively under-developed.

In summary, the current pattern of growth of Metropolitan Cork may be unsustainable in terms of the environment and the efficient provision of services. It is also spatially and socially unbalanced. A better approach would be to encourage, to manage and to direct this tremendous growth within an economic and balanced sustainable framework.

Achieving Sustainable Development in the Ring Towns and Rural Areas

Two strong trends are having a profound effect on the viability and character of the rural hinterland. The first is the steady, relentless fall in employment in agriculture and forestry. The second is the development of commuter housing in the countryside. Against these trends, maintaining rural communities and supporting the rural economy are important objectives that must be reconciled with sustainable development objectives in a realistic and practical way. Developing such a strategy is largely the task of the North and West Cork Strategic Plan 2001 - 2020, which must be supported by the strategies included in this Plan.

The Ring Towns are showing varying rates of growth but are generally prospering at present, despite their relative dependence on a declining agricultural hinterland. It follows that they will play a key role in the North and West Cork Strategic Plan as well as in relation to the City. The challenge will be to avoid the development of the Ring Towns as dormitories for Metropolitan Cork brought about by rising house prices and road improvements that will reduce journey times to the City, but instead to aim for employment-led growth of these towns.

Creating an Integrated and Environmentally Sound Transport System

As a result of the Cork Land Use and Transportation Study (LUTS) undertaken over 20 years ago, Cork has a high standard of road infrastructure. Under the National Development Plan, improvements to the radial routes connecting centres of population are now proposed. Public transport, however, has had little investment. This has resulted in a car-dependent trend fuelled by economic growth, rising car ownership and dispersed development. The large forecast growth in population and the increase in incomes enabling higher rates of car ownership will only make matters worse. Without a sustainable transport plan, traffic will double in 20 years, and peak hour travel speeds will fall to 5mph on most roads in the urban area. Travel times to work will become up to five times longer for some trips than they are at present.

The benefits of recent and planned improvements to the road network will be quickly eroded unless decisive action is taken. Commuter traffic will dominate the road network at the expense of its efficiency for strategic movement. Provision of new roads is not the answer, even if it were possible, in the attractive network of older towns in the Study Area. In particular, the City centre is, even now, degraded by the prevalence of cars, and this is an acknowledged obstacle to the City's regeneration.

Consequently, the development of an integrated transport system should be based on two key principles. First, the need for the location of new jobs and homes to be in balance in order to reduce car use, and second, the need to encourage greater use of public transport by achieving a marked improvement in standards of service and provision. This point is especially relevant for existing settlements that have developed with no particular consideration of public transport.

1.4 Strategy Development In Context

The Cork City-Region is not unique in facing the development issues that have been discussed in the previous section, and the need to plan strategically is widely recognised.

The European Spatial Development Perspective (ESDP) provides the highest level policy guidance towards the development of a spatial strategy for the Study Area. The ESPD is based upon the balanced pursuit of three equal goals, namely:

- Economic and social cohesion.
- Sustainable development.
- Balanced competitiveness across the European Union.

At a National level, the Economic and Social Research Institute's (ESRI) Medium Term Review 1999-2005 is key. This report noted the above average productivity and incomes of the South West Planning Region and suggested that this was based primarily on the strength of the Cork economy, notably its manufacturing sector. The Review noted

that development potential is not evenly spread throughout the country, and that economic clusters and concentrations are important in generating increasing returns. It was also observed that growth centres, usually those around cities of a certain size, would tend to interact with each other over space and form corridors or elongated growth centres.

Cork, as well as other cities, has many of the characteristics and attributes of successful growth centres, so that encouraging the development of Cork is considered a realistic and desirable goal for national and regional spatial planning. Such a policy would have considerable local benefits and may help to relieve the development pressures on the Dublin conurbation.

The National Spatial Strategy (NSS) is currently being prepared by the Department of the Environment and Local Government to provide a detailed framework for longer term spatial development of Ireland over a 20 year horizon. A public consultation paper "Indications for the Way Ahead" was published in 2001.

The NSS is being developed in the context of the unprecedented economic growth and social changes that have taken place in Ireland over recent years. This growth has led to substantial development pressures and chronic traffic congestion, most particularly in Dublin. The Greater Dublin area is forecast to continue to receive the lions share of national growth, thus exacerbating the existing problems of congestion and causing an overall decline in the quality of the environment and life in the capital. In contrast, other areas, notably the remoter rural areas, are experiencing a marked lack of employment opportunities, a problem that is being exacerbated by the continued decline in agriculture.

The NSS seeks to address the issue of uneven development by achieving a more balanced national spatial structure, and in particular relieving the tremendous development pressures upon Dublin. It sets out to develop the economic, social and environmental capability of the remainder of the country outside the Dublin Region to its full potential in order to optimise the performance of the country as a whole. The thrust of the emerging NSS is to identify and integrate the roles of both urban and rural areas, and to develop Ireland in terms of Functional Areas, each area being developed so as to reach critical mass.

Cork is already defined as a Gateway in the National Development Plan and has been designated as the focus for the proposed Southern Functional Area in the emerging NSS. Cork possesses all the attributes that the NSS defines as making an area economically successful – a large and skilled workforce, a capacity for learning and innovation, international transport connections and an attractive physical, social, and business environment.

The Cork Area Strategic Plan has been completed in advance of the NSS and will consequently inform the national strategy on development opportunities that exist in Cork. It will also demonstrate the practical application of many of the concepts that are emerging from the NSS. Notable amongst these are the creation of critical mass, the integration of land use and transport, the efficient use of existing and planned investments in infrastructure, and the provision of a high quality environment for people and inward investment. The success of Cork will in turn help the NSS to realise its aim of balancing regional development for the benefit of the whole nation.

In the meantime, the National Sustainable Development Strategy for Ireland provides a national context and policy framework for spatial planning in the Study Area.

A number of themes emerge that are of particular relevance to strategic planning, and these are:

- Closer co-ordination between land use planning and transport.
- Minimisation of traffic growth through improvements in the public transport network.
- Promotion of more efficient urban areas through higher development densities.
- The prudent use of land in the provision of new housing and reduced demand for infrastructure services.
- A general presumption against commuter housing in rural areas.

At regional level, the Southern and Eastern Region Development Strategy 2000-2006 provides a broad spatial and economic development context for the Study Area. The development objectives for the region are to:

- Develop the regional urban centres such as Cork, Limerick and Waterford as counter magnets to Dublin.
- Tackle social exclusion in both urban and rural deprived areas.
- Maintain viable rural economies.
- Foster economic growth in the Southern and Eastern Region while contributing to more spatially balanced economic activities.

1.5 Goals And Objectives

The themes set out in policy documents just cited informed the process of developing goals and objectives for the Cork Strategic Area Plan. The goals and objectives adopted for the Strategic Plan are summarised as follows:

- The Creation of a balanced and cohesive City Region, which avoids over-concentration and seeks to deliver some parity of benefits across the territory – specifically, as regards access to information, services, infrastructure and life chances.
- A sustainable mixture of land uses and building types with efficient transport so that movement growth is facilitated and optimised, use of public transport is maximised and both emissions and energy consumption are reduced. The promotion of walking and the improvement of urban environments.
- The reduction of peripherality by creation of multi-modal movement corridors and the enhancement of 'gateway' functions.
- Environmental balance, avoiding 'urban sprawl' where buildings spread uncontrolled out into the countryside and green belts, as well as the conservation of landscape and protection of heritage.
- Efficient expenditure of resources, including the efficient management and use of infrastructure and protection of water sources.
- Promotion of regional competitiveness, and the strengthening of innovative capability through both education and the application of advanced research in the industrial sector; the creation of economic complexes and clusters in advanced growth sectors (without the loss of robust economic diversity).
- A balance between competitiveness and collaboration, with different locations performing complementary economic functions so as to promote overall regional strength.
- Social balance and cohesion, social inclusion and equitable delivery of life chances.
- Conservation of heritage, landscape and the environment.

The key word balance stands out - spatial balance, environmental balance and social balance. Balance is required between competitiveness and dynamism on the one hand, and complementarity and conservation on the other.

The goals and objectives were developed for the study in consultation with local stakeholders. These are set out in Table 1.1.

1.6 The Strategic Plan And Other Studies

Although this study has employed a fresh approach to planning in the Cork City-Region, the Strategic Plan cannot take place in isolation from other initiatives. This chapter has already demonstrated how the Plan has been directed by higher level policy guidance. In a similar way, existing initiatives and established processes will be guided by the Strategic Plan, but will also provide much of the mechanism for progressing its recommendations and proposals.

In all situations the sequence of events is as follows:

(a) The Cork Area Strategic Plan identifies strategic policies and locations. This provides the top level policy guidance for – Development Plans, Housing Strategy Studies, and the Cork Strategic Retail Study. It will also guide other studies on, for example, transport, infrastucture and branding and marketing of the City-Region.

(b) Development and subsequent Local Area Plans (as appropriate) will then determine the more detailed local level policies and action initiatives. Subsequent action will then be initiated by the private sector (planning applications) or joint public/private partnership or by the public sector alone.

(c) Where there is little or no private sector market interest, then clearly at a corporate level (rather than a planning level) there will be a need for the two authorities to push hard to implement action or that element of the Cork Area Strategic Plan will fall behind.

Throughout the report, reference is made to the more detailed plans required. There is also a separate section on wider organisational issues regarding implementation.

A number of other parallel studies have been completed or are being undertaken in parallel with the CASP, including the North & West Cork Strategic Plan, the Cork Strategic Retail Study, the Waste Management Strategy for Cork Region, 2000-2020, and the Southern Health Board Corporate Plan, 2000-2003. These documents should be consulted in conjunction with CASP with regard to common planning areas or specific topics.

Table 1.1 **Key Goals Statement**

Goals	Policy Objectives
(1) Economic growth Create a highly competitive quality location so as to facilitate the growth of an innovative and advanced (but balanced and robust) economy.	01. To promote an innovative, advanced, high value-added and high wage economy 02. To retain a robust, well balanced economic structure 03 To create an internationally oriented and highly competitive location and remove obstacles to private-sector investment and activity
(2) Social inclusion Promote social inclusion (especially within Metropolitan Cork) so as to improve access to public transport, education and jobs as far as possible.	04. To create employment in more deprived areas 05. To improve access to facilities and services, including education, health, community services and utilities
(3) Environment Enhance the environmental quality and landscape setting of the Cork City-Region, and minimise impacts on ecologically sensitive areas and on built heritage and cultural landscapes.	06. To minimise impact on ecologically sensitive areas 07. To minimise impact to cultural heritage, character and setting of the City, towns and villages 08. To promote the sustainable use of resources, including waste recycling and effective waste management. 09. To minimise the effects on rural landscape character 010. To ensure ready access to open space and natural landscape
(4) Balanced spatial development Include the City, its satellites, Ring Towns and rural settlements as part of a balanced settlement system with all levels of development in accordance with varying economic potential.	011. To deliver equivalent benefits to the entire area 012. To locate economic activity appropriate to smaller settlements or centres in them 013. To avoid excessive routine commuting 014. To create a dispersed location pattern within Metropolitan Cork
(5) Urban renewal Recognise the City as the heart of the region. Promote a high level of economic activity in the City centre and ensure that the housing stock and urban services retain their attractiveness in general balance with the suburbs. Synthesise urban renewal with conservation of historic form and character.	015. To promote the City Centre as the major area of comparison shopping, services and culture in the region 016. To promote regeneration of run-down urban areas 017. To provide high quality public transport to reinforce the role of the City Centre
(6) Transportation Maximise the use of fully accessible public transport by co-ordinating building form, use and density with high quality bus and train services as well as regulating cars and other traffic. Promote walking by improving the pedestrian environment.	018. To ensure the provision of a well functioning, integrated public transport system, which enhances competitiveness, sustains economic progress and contributes to social cohesion 019. To ensure the provision of a defined standard of the public transport, at reasonable cost to the customer and the taxpayer 020. To ensure the timely and cost effective delivery of the accelerated investment in infrastructure and facilities necessary to ensure improved public transport provision 021 To reduce car dependency
(7) Infrastructure Minimise the cost of providing water, sewerage, electricity, gas and telecommunications services to the population.	022. To maximise the use of existing infrastructure 023. Minimise the cost of new service provision and operation

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THE STRATEGIC PLAN

THE STRATEGIC PLAN

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2: The Proposed Strategy

2.1 Introduction

The proposed strategy has been drawn up to achieve a Vision for Cork, to address the key issues identified for Cork and to improve the quality of life for the people of Cork and their visitors over the next 20 years.

The proposed strategy will provide a reference framework within which other areas of public policy and service provision can be implemented. The proposed strategy is a spatial strategy that facilitates the parallel development and implementation of social, cultural, political, economic and environmental policies, strategies and programmes within the Study Area. It seeks to provide a sustainable spatial development pattern while taking into account existing planning commitments and short term market trends.

A number of alternatives were considered in developing the proposed strategy, which has been developed by combining those elements of the alternative strategies that most closely meet the goals and objectives set out during the course of the study. It also takes into account comments arising from the public consultation process. The alternative strategies that were considered are described in Part B - Chapter 8.

It is recognised that implementing the proposed strategy will be a challenge, particularly in the short term, since in many areas the proposed strategy is seeking to reverse existing development trends. However, this challenge can be met provided the public and private sectors are able to co-operate in realising a shared vision of Cork - as an economic, social, cultural, political and environmental capital of a prosperous and thriving European city region.

This chapter outlines the overall thrust of the strategic plan and describes the key plan concepts and how they relate to each other in a coherent whole. The main proposals of the strategy are explained in this section. They are supported by and elaborated on in more detailed guidance statements and notes set out in Appendix C.

2.2 Key Concepts

The proposed strategy seeks to move towards a more sustainable form of development for the Cork Area. The spatial strategy will provide greater accessibility in terms of educational, employment, health, culture, leisure and service opportunities for all the people of Cork by improving the choice and quality of transport services. This improved access and accessibility is one of the keys to improving the overall quality of life.

By promoting a strong sub-regional settlement pattern, based upon the promotion of urban renewal and an integrated land use/public transport strategy, the spatial strategy seeks to reinforce the importance of making optimal use of existing strengths while giving new impetus and direction to the remarkable growth potential in the area. The strategy aims to match the location of new housing as closely as possible with the location of employment growth centres in order to minimise commuting. It will significantly reduce the per capita cost of providing new infrastructure services by requiring an overall rise in housing densities and for development to be concentrated rather than dispersed, thus counteracting the current trend towards the suburbanisation of the Study Area. Equally importantly, the strategy is expected to provide the basis for a good business environment, to promote the wise use of natural resources, particularly minimising the loss of agricultural land, and to create and maintain a high quality natural, cultural and social environment.

This spatial strategy, which is illustrated in Figure 2.1, is underpinned by the following main concepts:

Revitalisation of Cork City
Cork City will be revitalised as the heart of a thriving city region and the capital of the prosperous province of Munster. The strategy envisages an acceleration in investment in the City proper and a significant increase in both population and jobs. There will be a particular focus on the Inner City, which is the area with the greatest potential while having some of the most significant urban problems.

Redefinition of Metropolitan Cork
A key component of the overall strategy is the concept of Metropolitan Cork, which encompasses both the City proper, and the settlements of Ballincollig, Blarney, Carrigaline, Douglas, Glanmire, Glounthane, Carrigtwohill, Midleton and Cobh. It is envisaged as a unified entity having a single jobs and property market, an integrated transport system, and the social, cultural and educational facilities of a modern European city.

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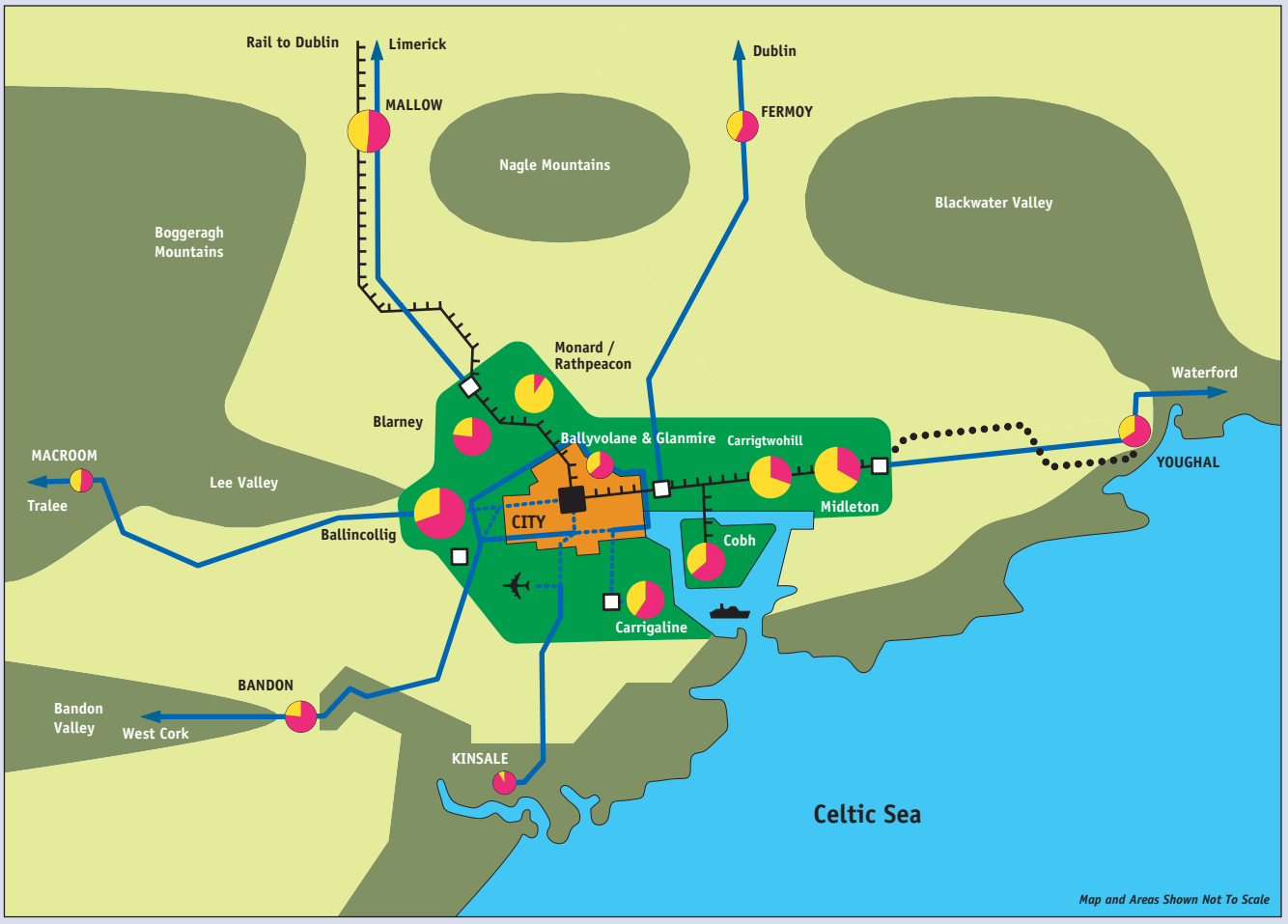
Figure 2.1 **Cork Area Strategic Plan Diagram**



2: The Proposed Strategy

Reinforcement of the Ring Towns and the Implementation of a Rural Strategy

The Ring Towns will become the focus for growth outside the Metropolitan area and new housing provision will be balanced with the provision of new employment opportunities. Housing in the rural hinterland and single houses in the countryside will be subject to a Rural Housing Strategy to be completed by Cork County Council in conjunction with the adoption of its next development plan in 2003.

Infrastructure Led Development

The Cork Area Strategic Plan seeks to ensure that infrastructure (including roads, public transport, water and sewerage) and community facilities are provided ahead or in tandem with housing and other uses in all new development areas. Therefore, for example, investment in the railway should run in advance or in parallel with development in the rail corridor.

Creation of an Integrated Transport System

The creation of an integrated transport system based upon 'state of the art' public transport facilities and a well managed roads system is central to improving accessibility and providing choice of transport access for all. This system will be based upon the concept of "total journey quality" for non car users, and will comprise a suburban rail network and a high quality bus network, both supported by Park and Ride facilities. These would offer fast, frequent services linking the City Centre at Kent Station with Metropolitan Cork and the Ring Towns. The strategy also assumes the construction of essential strategic road links, and builds upon existing commitments to improve the road network.

Creation and Maintenance of a High Quality Environment

The overall quality of life as expressed in the natural, social and cultural environment is one of the key attributes that attracts new businesses and skilled workers to a developing region. The quality of life available in Cork is a both major marketing strength and a highly prized asset recognised nationally and internationally. The natural environment and in particular the spectacular harbour area are without comparison elsewhere in Europe. Protecting this asset and the social and cultural assets in all their manifestations is therefore vital to the future success of the area.

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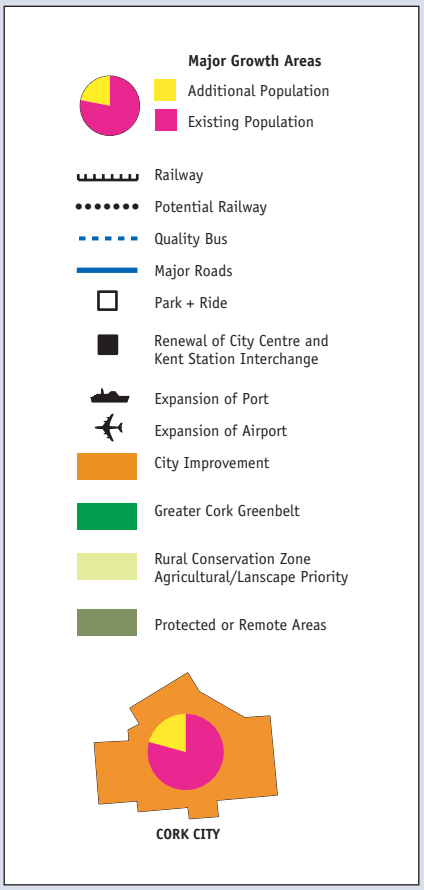


2.3 Scale Of Anticipated Growth

Distribution of Growth

A substantial level of growth in both population and employment is forecast for the Study Area over the next 20 years. The research carried out as part of the study indicates that the population will increase by 23 per cent or 78,000 people over this period. The number of jobs required to support this new population will be 46,370, or an increase of 30 per cent. This population and the jobs will be distributed throughout the Study Area as described below.

Table 2.1 **Future Population**

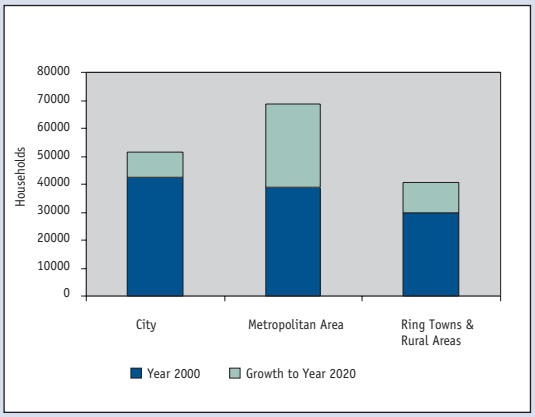
	2000 Population	2020 Population	Growth Population	Growth Dwellings
City	123,810	135,820	12,010	11,090
The rest of Metropolitan Cork	127,700	180,710	53,010	32,870
Ring Towns & Rural Areas	93,590	106,620	13,030	12,310
Total	**345,100**	**423,150**	**78,050**	**56,270**

Table 2.2 **Future Employment**

	2000 Jobs	2020 Jobs	Growth Jobs
City	65,380	81,560	16,180
The Rest of Metropolitan Cork	52,580	78,750	26,170
Ring Towns & Rural Areas	37,040	41,060	4,020
Total	**155,000**	**201,370**	**46,370**

The scale of growth envisaged, and its distribution, is illustrated on Figure 2.2

Figure 2.2 **Scale of Growth**



Additional Growth

The projected future housing requirement is based on estimates of migration and household formation that arise from application of the ESRI Medium Term Review estimates of sectoral employment growth.

It is prudent, however, to make provision for a possible higher level of provision over the next six years in the first tranche of development in the Cork Area Strategic Plan to reflect the views set out in the Bacon 3 Report on the Housing Market in Ireland. In addition it is likely that the National Spatial Strategy will underpin some shift of development away from Dublin, towards regional centres, including Cork. It is well within the capacity and ambition of Cork to absorb the additional population and employment growth that might ensue from such a national planning strategy. Such a policy decision would strengthen the Cork Area Strategic Plan. The possible additional growth in the next six years is illustrated in Table 2.3 below.

2.4 Proposed Spatial Strategy

The City

Underpinning the proposed strategy is a vision of the City of Cork as the capital of a prosperous and thriving region and the key driver in terms of its social, economic and cultural vitality. In order to fulfil that role, the proposed strategy sets out how the key elements of the social, economic and cultural life must be developed and managed. It sets out a spatial strategy that includes the key infrastructure elements that are necessary to create an optimal and balanced spatial layout for the City and the region.

Cork is the social, economic and educational focus for the region. It has two major third level institutions and a major research facility in the NMRC that reinforce that role. These institutions are complemented by the large number of prestigious high tech companies that are based in the immediate hinterland of the City. These and other organisations continue to attract large numbers of new employees, many of whom come from outside the region. This influx of new populations brings with them a new set of skills and abilities, demands, needs and perceptions that add a vitality and impetus to the social and economic life of the City.

The City's role as the engine of growth for the region must therefore be further maintained and developed. To ensure it drives the area's economy, its own growth must be robust and sustained. The City's economic future lies in the development of service industries, finance, banking, education, health, informatics and digital media. It must also serve as the centre for comparison shopping for Cork and beyond.

The needs of the people of the City are changing in terms of the scope and level of services they require

Table 2.3 **Potential Additional Growth from 2000 to 2006**

	Population	Dwellings	Jobs
City	2,750	1,000	3,200
The Rest of Metropolitan Cork	10,200	3,710	2,600
Ring Towns and Rural Areas	3,550	1,290	1,700
Total Study Area	**16,500**	**6,000**	**7,500**

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not only in the commercial sphere but also in the social and cultural sphere. The City has a vibrant cultural life and a social dynamic that has given it the confidence to become the European City of Culture for 2004. The proposed strategy will provide a background against which these changes can be accommodated and managed.

As a result of the initiatives being proposed by the strategy, there will be an increase of 12,000 (nearly 15,000 if the additional growth outlined above is included) in the population, bringing the resident City population to over 135,000 (over 138,000 with the additional growth). There will be also be an increase of over 16,000 (19,000 with the additional growth) in the number of new jobs created in the City and these will be concentrated in central and southeast Cork (Docklands), and to a lesser extent in northeast Cork, although all areas of the City will see some growth in employment. A detailed forecast of the increase in population, households and jobs is given in Appendix G.

City Centre and the Island

The proposed strategy sets out a radical proposal for the revitalisation of the city centre. This inner city concept plan is shown on Figure 2.3. It focuses on arresting the decline in resident population, physical fabric and commercial vitality by concentrating action in a structured manner on the four areas outlined in the diagram - the central Island, the southern and northern areas, and a new development area in the docklands.

The further regeneration of the centre of Cork City is seen as a priority. It will enhance the value of the whole City and the region by raising awareness of the City generally, by improving the commercial environment, by attracting residents back into the City, and by providing a background against which the social and cultural life can expand.

The City's Historic Centre Action Plan of 1994 has already given a major boost to conservation of the area, and this work should continue through similar programmes, as well as the development control process. There is both the need and the opportunity for immediate repair and regeneration of building stock, for environmental improvement and infilling of new buildings in a sensitive manner. There are immediate opportunities for redevelopment in key sites in the short term, which must be progressed.

A key component of this strategy will be the increase in pedestrian priority in the entire Island (and related linkages) allowing access for buses, taxis, bicycles, service and emergency traffic.

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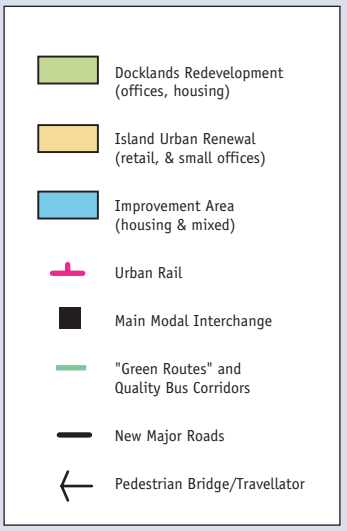


Inner City Fringes

The regeneration and revitalisation of the inner city fringe areas will be approached in a similar manner to that proposed for the central Island. The physical fabric of these areas also needs to be regenerated by a combination of conservation, improvement and infill, having regard to the historic streetscape and character of each location.

The Docks Area

The potential for creating a new, modern, mixed use district in the city docks, as well as the urgent need to do so, was identified in the early stages of this study. This concept quickly found strong agreement with local and national stakeholders. Such is the dynamic nature of the Cork Area Strategic Plan process, that Cork City Council rapidly embraced this project, to the extent that a Docklands Development Strategy has been commissioned.

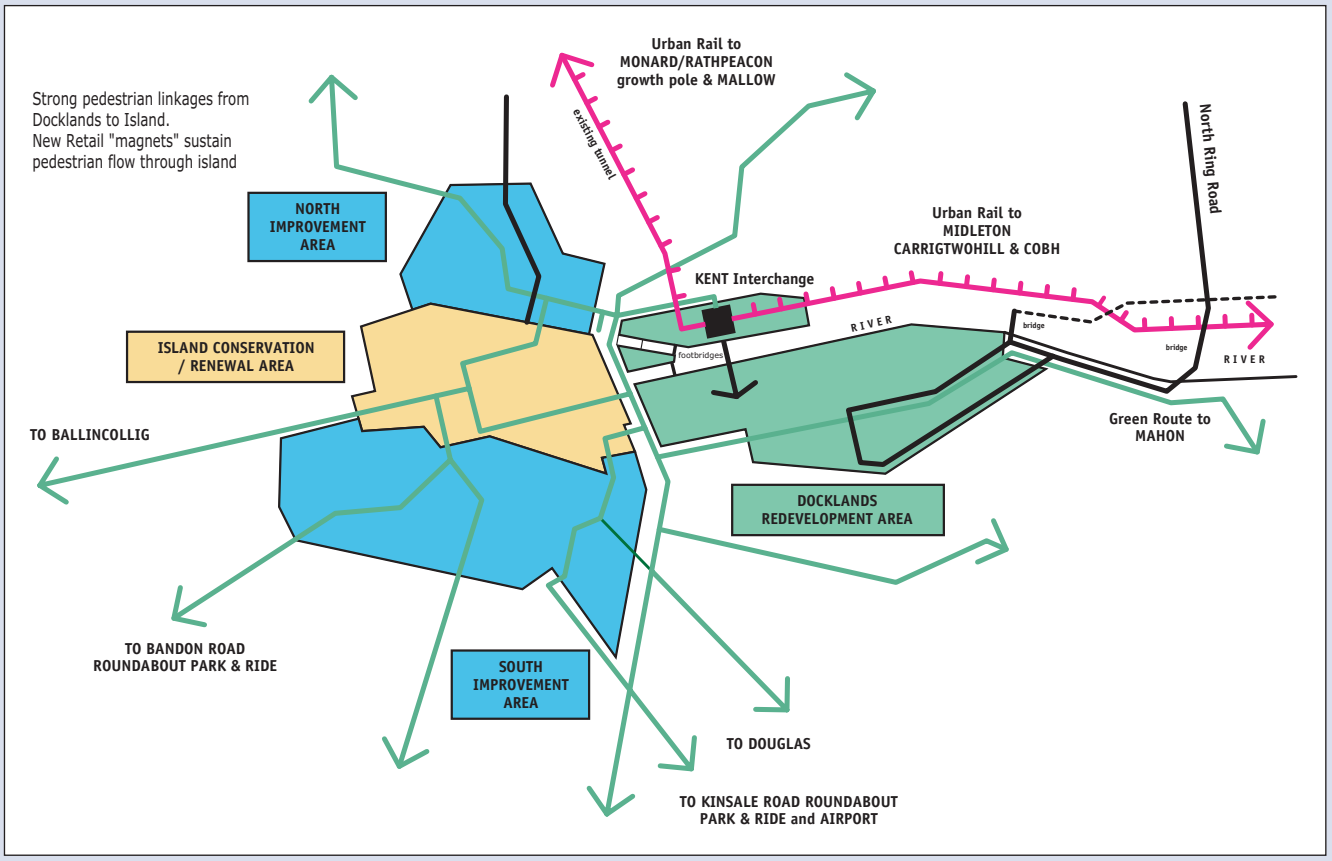
The local area plan includes the Kent Station environs, the point of the Island, and the south bank as far as Monahan's Road. Further studies will need to look at the wider impacts of reorganising port activities in the harbour area. As port activities gradually move further downstream, the opportunity will be taken to reconstruct the area. This work will be phased over 20 years and would include a mix of uses, including major modern offices and medium to high density housing together with supporting speciality and local retail, services and leisure. New bridges could link the area from the east and north and a direct pedestrian link from a Kent Station bus/rail interchange over the river would allow commuters convenient access to workplaces. Visual and formal relationships and pedestrian linkages from the historic core will be required to draw people into the area along key retail streets and ensure continuing or improved viability of intervening areas, thereby spreading benefits widely.

Metropolitan Cork

The Vision for Cork sees the redefinition of the towns and areas in the immediate hinterland of the City of Cork as a single integrated unit. This area will be known as Metropolitan Cork. It will include the settlements of Ballincollig, Blarney, Carrigaline, Douglas, Glanmire, Glounthaune, Carrigtwohill, Midleton and Cobh, together with the smaller settlements in between these areas and the City.

Metropolitan Cork will provide the educational facilities, employment opportunities and the range of social and cultural services of any comparable city in Europe. It will have a state of the art integrated transport system including high quality suburban rail services and high quality bus services that will serve

Figure 2.3 **A Concept for the Inner City**



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to increase the accessibility of the City centre and each settlement within Metropolitan Cork and provide equality of choice of access for all. Metropolitan Cork will function as a single housing and jobs market. An additional 26,000 (29,000 with additional growth) new jobs will be created in Metropolitan Cork supporting an additional population of nearly 33,000 (36,000 with the potential additional growth arising from the NSS). The overall population of the Metropolitan and City Areas will be over 300,000 people. The distribution of jobs and population in Metropolitan Cork is given in Appendix G.

Each individual town within the Metropolitan area will retain its own services and facilities and will protect its own distinctive identity. Each one would have a clear edge and be surrounded by a high quality landscape. These green areas will contain recreational facilities and will allow ready access to the countryside. They will also serve as wildlife corridors.

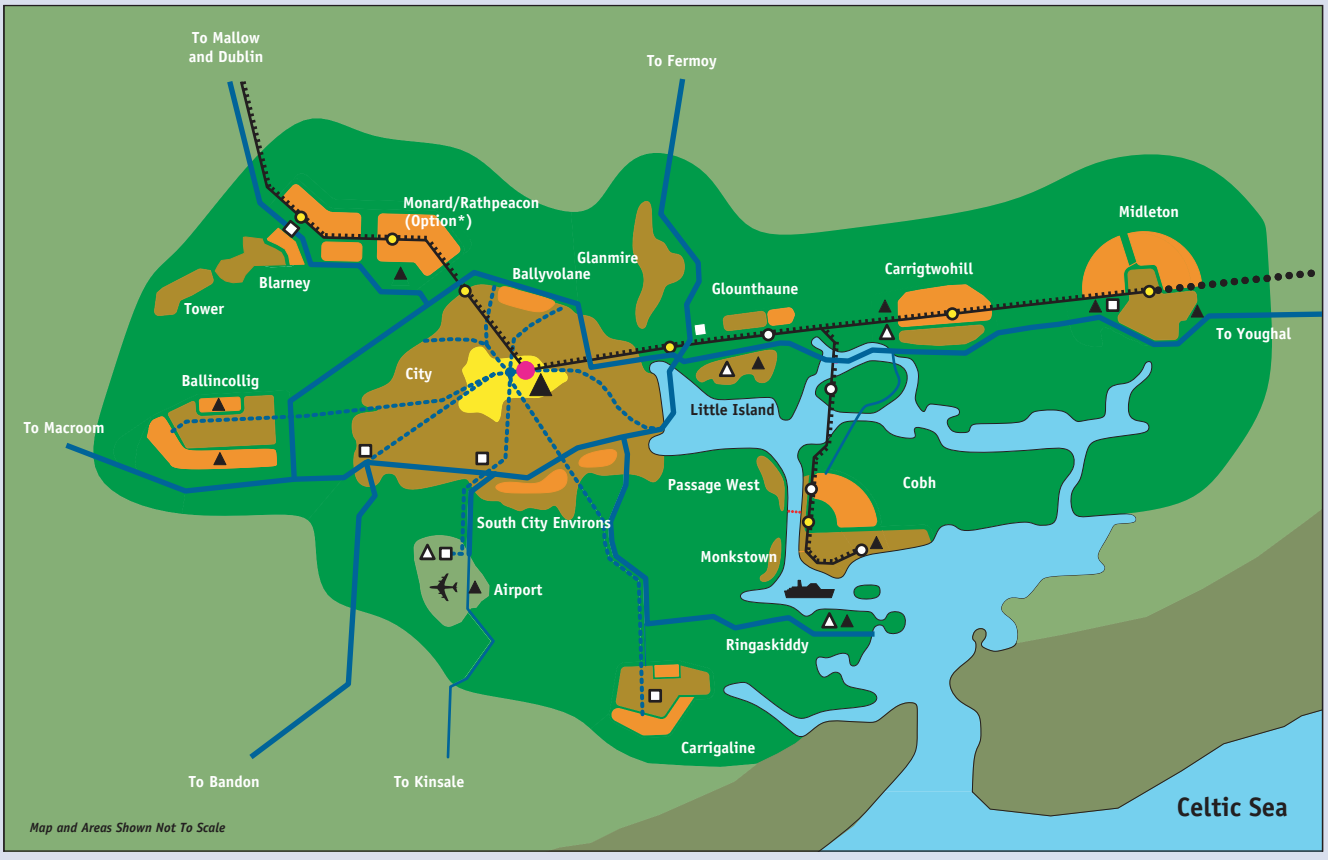
Metropolitan Area Structure Plan

The Structure Plan, which is illustrated in Figure 2.4, proposes that growth will be based upon consolidating existing settlements and expanding and improving other settlements. The growth areas would all be served by a high quality rail or bus system.

The focus is on providing a balanced spatial development pattern that provides for consolidation of the development on the western and southern edges of the City and development of the potential of the northern and eastern sides of the City by maximising the use of the rail corridor that is already in place, and using it as a catalyst for the development of a fully integrated public transport system.

Expansion of Metropolitan Cork in the west will see **Ballincollig** grow to a population of up to 26,000 by 2020, based upon its undoubted strengths as an employment and commercial centre, and its attractive residential environment. The former barracks site and adjacent areas provide an excellent opportunity to enlarge the town centre in order that it can better serve the needs of the expanding community. However, it is essential that this area is developed in an integrated manner and a comprehensive approach to planning needs to be adopted in line with the Brady Shipman Martin Study. Not all of the land between Ballincollig and the new bypass will need to be zoned and developed in the Plan period to meet forecast housing requirements. This unzoned land should be retained as a strategic land reserve. No development should be allowed south of the bypass.

Figure 2.4 **Structure Diagram for Metropolitan Cork**



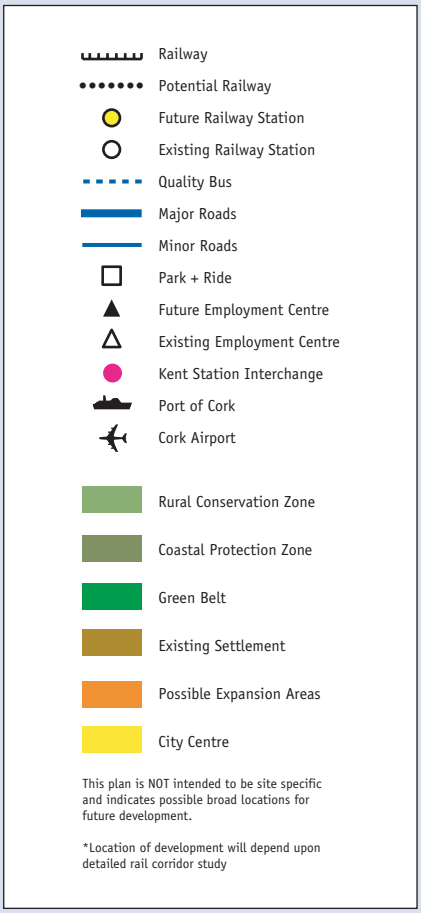
There will be substantial increases in housing provision on the southern edge of the City in the early part of the Plan period. This will be largely to the east, south and west of **Douglas** village, a highly successful commercial and community centre. Further growth in the area should help strengthen the range of facilities in the village and encourage environmental improvements, including measures to improve pedestrian priority and movement. In addition, the management of transport in Douglas village will be integrated with traffic management systems in the City and public transport provision for the area will also be improved. Development in this area will be through sensitive infilling and rounding off to natural boundaries such as below ridge or tree lines as defined in the Development Plan.

Beyond the existing Green Belt to the south, urban development will be constrained by increasingly congested road access. The strategy for **Carrigaline** is to strengthen and improve the existing town centre and to create a more balanced structure to the town. The provision of a link road to the east and south of the town will open up additional development areas and relieve congestion in the town centre. This will permit further commercial development and facilitate the implementation of traffic calming schemes. Newly zoned land, together with existing housing allocations, will be sufficient to meet housing forecasts, including a headroom provision. Providing that these developments proceed as planned, further significant development to the north of the town will not be required. Nevertheless, progress should be monitored and the proposed zoning requirements reviewed within 2 years to ensure that the growth targets of the Strategic Plan are being met. In the event that this review shows that these lands cannot be developed within a reasonable time frame, the planning authority may need to consider designating land for housing north of the town.

There will be a major growth corridor in the northern and eastern part of the Metropolitan area between **Blarney** and **Midleton**. This will help achieve greater social inclusion by improving access to public transport, jobs and services, amenities and a wider range of housing. The plan includes significant regeneration of the docklands area of the City and the associated spin-off development within easy travelling distance of the City. The location for the development must be close to the existing rail system in order to avoid the traffic gridlock that would occur if a simple roll out of the City were to be adopted as a policy.

Central to this strategy is the upgrading and better utilisation of the rail system, and the location of development to avail of the rail infrastructure. Rebalancing of the City socially, economically and spatially by providing for growth on its Northside is also a strategic objective of the Plan. For these reasons, the focus for development must be between

Legend



2: The Proposed Strategy

Blarney and Midleton. The Plan favours **Monard/Rathpeacon** for some of this development subject to a detailed assessment. At the same time the Plan recognises that its core aims and objectives can be achieved through a dispersal of that growth within the catchment of the rail corridor from Blarney to Midleton, possibly around existing development centres.

Following the adoption of CASP, the Department of Public Enterprise, Iarnrod Eireann, Cork County and Cork City Council have agreed to carry out a feasibility study into the rail aspects of the Plan, including the location and type of new development and its integration with new stations.

There will be infilling in **Glounthaune** and the **Riverstown** and **Glanmire** areas, especially in locations with easy access to the existing rail station.

Extensive growth will be focused in **Carrigtwohill**, which is well located for both industry and housing development and has the ability to absorb further growth in a sustainable manner. For similar reasons, **Midleton** is expected to continue its rapid growth over the next 20 years to become the largest town in the east of Metropolitan Cork, balancing the growth of Ballincollig to the west.

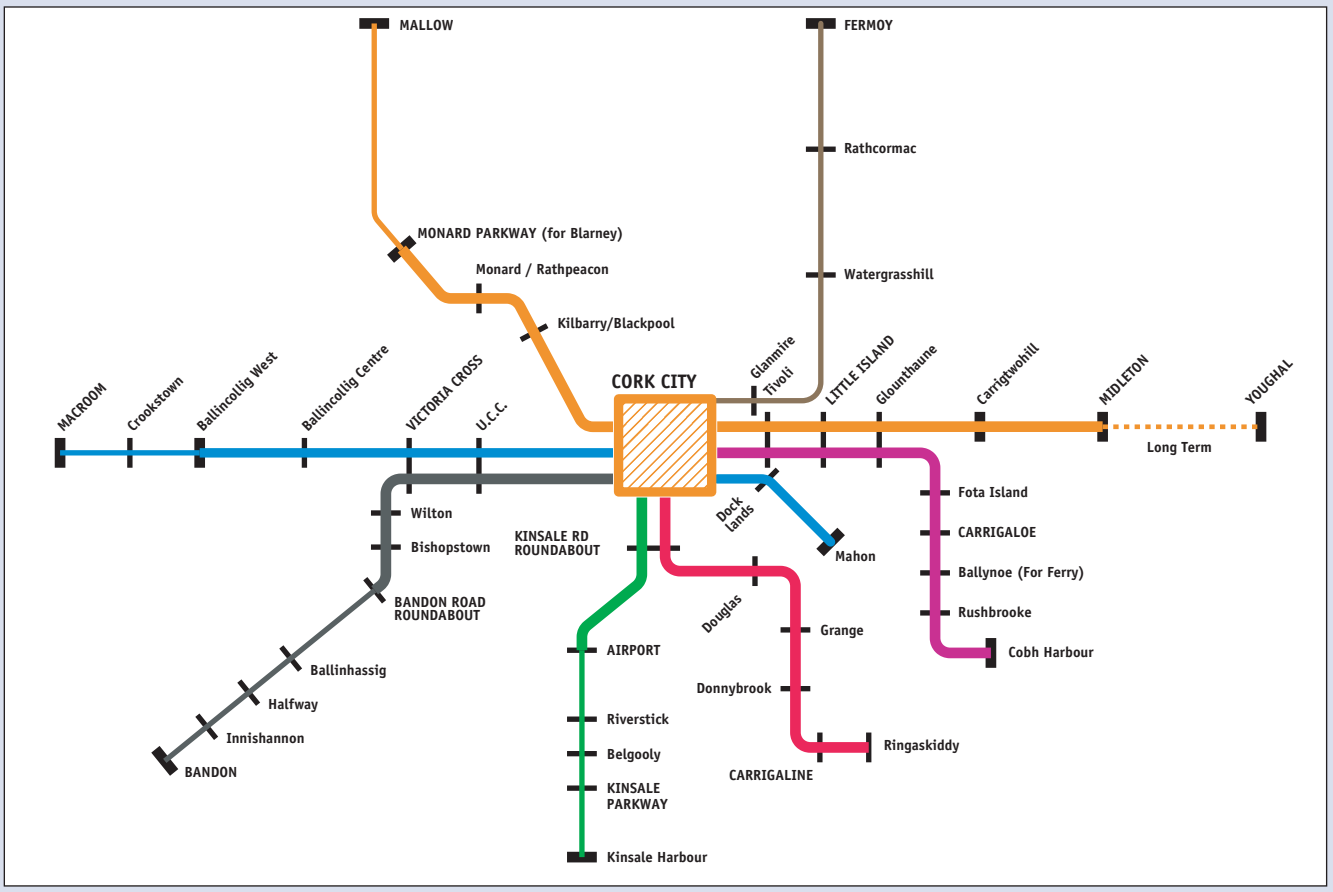
Relatively extensive development will also be encouraged in **Cobh** in order to take advantage of its good rail connection, existing infrastructure and ability to expand with minimal environmental impact.

Local area plans will need to be prepared for major expansion areas and guidance on this given in Appendix C.

Metropolitan Area Transport System

As described above, the growth areas in Metropolitan Cork would be centred on, and served by, a high quality rail and bus system. An illustration of how this might look in 2020 is shown on Figure 2.5. This would include the Blarney – Cobh - Midleton railway service at high frequency, plus high quality bus-based links to Ballincollig, the airport and Carrigaline (with potential for upgrading to light rail). These routes would all interchange at Kent Station. The design of stations and stops would be by far the greatest factor influencing local plans, as regards land use, density and road layout. The objective being to make the journey to work, home and shops as fast, convenient and enjoyable as possible, and to minimise the incentive to use private cars. The Kent Station interchange and other lesser stations and stops in the City centre and in suburban centres will be the key drivers of urban

Figure 2.5 **Schematic Public Transport Map for Cork in the Year 2020**



renewal. A strategic road link is proposed, namely a new northern ring road from Ballincollig to Kilbarry and on to Tivoli.

Metropolitan Cork and the Green Belt
It is proposed that the current boundary of the Green Belt be extended to include the proposed new development areas and to effectively define the extent of Metropolitan Cork. The extended Green Belt will also perform an important role in protecting strategic gaps between settlements, so that the setting and identity of historic towns and villages is maintained.

The Plan recognizes the centrality of the retention of the Green Belt immediately surrounding the City. However, given the need to address the serious traffic congestion in the Bishopstown area, and the wish of C.I.T. to develop its facilities in accordance with its strategy, Cork County Council, as the planning authority for the area between the western boundary of the City and Ballincollig, will ensure that Green Belt policy for this area will allow both for the completion of the C.I.T. development and any recommendations for traffic relief measures, including improved access to the C.I.T. which may emerge from a traffic study, which has been commissioned jointly by the City and County.

In a number of locations, some adjustment to the inner boundary might also be necessary to allow for the efficient planning of the expanded settlements, to round off some settlements or for strategic interventions that contribute to the overall well being of the Study Area. However, changes should only made where they do not affect the overall integrity and functions of the Green Belt.

Legend

Midleton Line	Rail
Cobh Line	Rail
Ringaskiddy Line	Bus
Airport Line	Bus
Bandon Line	Bus
Central Line	Bus
Fermoy Line	Bus

* Park & Ride Stations Shown In Capital Letters
* Thick Lines Denote Frequent Service
* Thin Lines Denote Less Frequent Service

In addition to reviewing existing boundaries, consideration should also be given to simplifying the current regulations for development in the Green Belt, including reducing the current list of exceptions, in order to reduce incremental erosion.

The Ring Towns and Rural Areas
The Proposed Strategy for the Ring Towns and the Rural Areas focuses on the reinforcement of the Ring Towns of Kinsale, Bandon, Macroom, Mallow, Fermoy and Youghal and the implementation of a complementary rural strategy, which reflects the need to concentrate new development in compact, sustainable forms, easily serviced by public transport, utilities and social, cultural and commercial facilities.

The role of the Ring Towns within the Study Area and their links to the City and the Metropolitan Area will be reinforced by the development of the integrated public transport system which will link each of the towns by high quality bus or rail to the City centre.

The growth target proposed for the Ring Towns and rural areas is set so as not to reduce the capacity of Cork City to sustain its role as the engine of regional growth. It is also considered the maximum (aggregate) growth achievable by the Ring Town economies without undue dependence upon commuting into Metropolitan Cork. High levels of routine commuting are not consistent with sustainable development principles and would also undermine efforts at inner city urban renewal.

It is to be noted that the relationship of Macroom to its rural hinterland is being examined in a separate but parallel strategic study for North and West County Cork, North and West County Cork Strategic Study 2001–2020. It is intended that both studies deliver complementary policies for Macroom.

The population of the Ring Towns and rural areas will increase by 13,000 (nearly 17,000 if the NSS is implemented) over the next 20 years. A breakdown of the population and employment is indicated in Appendix G. Most of this increase will be in the Ring Towns themselves. An additional 4,000 jobs (nearly 6,000 with the NSS) will be created in the Ring Towns over the study period.

2: The Proposed Strategy

Strategy for the Rural Areas

The focus of the rural strategy will be upon the development of the Ring Towns as self-sufficient urban settlements, balancing new housing growth as far as possible with the provision of new employment and commercial opportunities. The Ring Towns will play the key role in the sustainable development of the rural areas on the basis that they are the locations more likely to attract regeneration opportunities than the more dispersed villages and small settlements. Moreover, the concentration of investment in the Ring Towns will be far more cost effective than if it were to be spread more thinly throughout the wider rural area. A broad strategy for the development of each of the Ring Towns is given below. Illustrative structure diagrams are shown in Figure 2.6.

Substantial growth is proposed at **Mallow**, reflecting its potential to attract major new industrial development, its large hinterland and its good road and rail connections. Industrial and residential land can be provided without impinging upon the landscape setting and character of the town or encroaching upon environmentally sensitive areas and sites. Major opportunities lie to the north of the town and slightly smaller opportunities to the south and southeast. The Blackwater Valley represents an environmental constraint to the east and west, but also a pleasant local amenity.

Fermoy is strategically situated on the road to Dublin and it has attracted substantial inward investment in the past. Construction of the bypass will allow Fermoy to accommodate substantial new growth to the north and the south without adversely affecting the town's attractive setting and historic townscape.

Youghal should be able to attract further industry and increased tourism to the town once the bypass removes through traffic from the centre. Urban expansion should be contained within the line of the bypass, and new housing areas will need to be linked to the existing centre. Care will be needed in the location of new retail facilities to ensure that they do not undermine the role of the town centre. Youghal's potential for growth could be further strengthened in the longer term by the re-instatement of the Cork/Midleton/Youghal line.

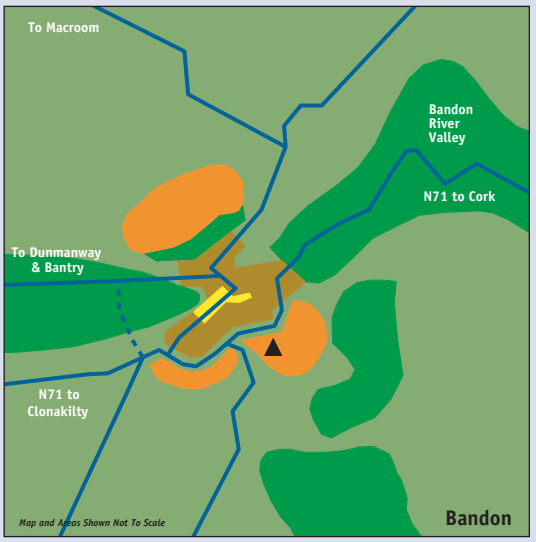
Bandon has grown rapidly in recent years on the basis of industrial investment in and around the town. The town has a fine townscape and good landscape setting, and the relief road will improve environmental conditions in the town centre when it is completed. Continued growth in Bandon is proposed. Short term opportunities are to the south, accessible from the relief road. Options for a second river crossing and western relief road should be examined – this would also facilitate development to the north of the town possibly over the ridge.

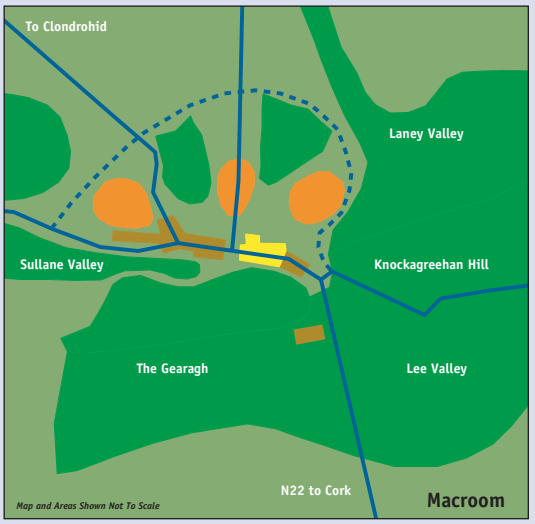
Figure 2.6 **Illustrative Structure Diagrams for the Ring Towns**

Legend

- Railway
- Potential Railway
- Future Railway Station
- Existing Railway Station
- Proposed/Potential Bypass
- Major Roads
- Minor Roads
- Park + Ride
- Future Employment Centre
- Existing Employment Centre
- Rural Conservation Zone
- Coastal Protection Zone
- Protected or Remote Areas
- Existing Settlement
- Possible Expansion Areas
- Town Centre

This plan is NOT intended to be site specific and indicates possible broad locations for future development.





Macroom is a key service centre for the western part of the county. Landscape and ecological constraints and the high cost of infrastructure provision mean that the creation of a compact, spatially balanced town structure will require exceptionally careful planning and design. However, development within the line of a new bypass to the north (once the exact line has been determined) is likely to increase the development potential of the town. Macroom is recommended as an urban development centre (housing) and an economic development centre (employment and services) in the North and West Cork Strategic Plan. This Plan has a rural development brief and has determined that, because of Macroom's strategic location in relation to the County's most vulnerable rural areas, it merits special attention, investment and promotion.

Low growth is proposed in **Kinsale** to reflect the very sensitive townscape and landscape setting and to protect the local tourist industry. Small scale infilling is proposed as the most appropriate form of development, with emphasis being given to developments that would strengthen the town's rural service centre or tourist functions.

Local Area Plans will need to be prepared to cover each of the Ring Towns.

Strategy for the Ring Town Hinterlands
Sustainable development principles and Government advice suggest that villages should be the primary focus of development in the countryside. Villages that possess a good range of community and social facilities, are well located on national and regional roads, and can be expanded without adverse impact upon the local environment, will be the most suitable locations for growth. Smaller villages with only a basic range of facilities may also benefit from some growth, especially where the population level is already enough to justify the provision of additional community facilities or where local employment opportunities would justify expansion of the settlement. In all cases, environmental constraints would remain an important factor in deciding whether village expansion was sustainable.

Villages would also be the most suitable location for the development of small-scale businesses. Major industrial facilities should, however, be located in the Ring Towns, since they are most likely to possess the workforce, housing and infrastructure to support such enterprises in a sustainable manner.

It is considered unlikely that population growth, or shortage of suitable development sites in existing villages, could justify the establishment of new settlements in rural areas. The preferred strategy is to strengthen existing rural communities, rather than create new ones. This is likely to bring more benefit to the existing residents, potentially utilise under-used infrastructure and facilities, and result in the loss of less agricultural land.

Housing in the rural hinterland and single houses in the countryside will be subject to a Rural Housing Strategy to be completed by the County Council in conjunction with the adoption of the next Development Plan in 2003.

Cork Area Strategic Plan 2001-2020 policies for rural areas address problems experienced by the parts of the county that are under urban development pressure owing to their proximity to the City. In other parts of the county, rural issues may be different and these are addressed by the North and West Cork Strategic Plan.

2.5 Key Transport Proposals

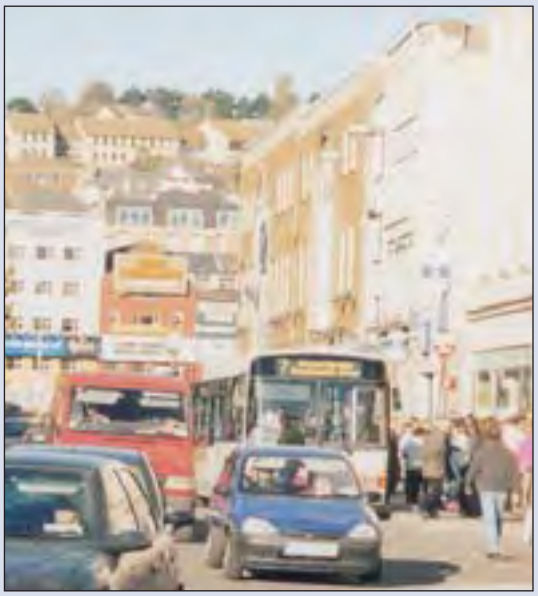
An Integrated Transport System
A modern, efficient economy needs a modern, efficient transport system to allow the easy movement of people and goods on a daily and ongoing basis. An integrated transport system means that all elements of the planning, design and operation of the transport system from roads, carparks and cycle lanes to buses, bus stops and train stations are coordinated so that the end user, be it as the passenger, driver or cyclist, has an optimal range of choices for each journey and that each journey can be made easily and without undue impediment or penalty from door to door.

The Vision for Cork sees the City, the Metropolitan Area, the Ring Towns and the rural areas as having such an integrated transport system within the timeframe of the study. The modes of transport that make up the integrated system will be road, rail, bus, ferry, cycling, motorcycling and walking. Other modes may be included in the future if and when their use and development is required in Cork.

Planning and the Integrated Transport System
The key to the integration of the transport system is that the planning for the provision of services for all modes is co-ordinated by and between the respective responsible agencies. For the benefits of this level of integration to be maximised, the whole transport planning process must be closely and directly linked with the spatial and land use planning process so that demand for transport services can be managed at a strategic level and that economies of scale are provided for major investments.

A good example of integrated planning will be the development of a central public transport interchange at Kent Station/Horgans Quay. The provision of an appropriate public transport interchange at Kent Station /Horgan's Quay provides many strategic benefits. Other locations for public transport facilities may be considered in order to meet the total public transport service requirements.

The integration of the public transport services and non car modes of travel will be given a special prominence in the planning of the integrated transport system. The provision and management of roads, parking and facilities for private cars and road based transport must be carefully managed and monitored so that road access is given an appropriate role in the integrated system without compromising, for example, the strategic role of national trunk routes for access to the port and the airport. Equally, consideration should also be given to the provision of dedicated public transport corridors as part of the development of the major orbital and radial routes on the approaches to the City.



It must be recognised that different levels of integration and service provision are possible and practical in the different parts of the Study Area, but the approach and philosophy must be the same. In the urban areas there will, for example, be great emphasis on the provision and use of frequent public transport services. The scope for provision and indeed the demand for services in rural areas will be quite different. The approach to reducing car dependency reflects the differing circumstances and needs of different parts of Cork. It recognises that, in some areas, road transport and car ownership will remain a necessity for many communities, businesses and visitors, whereas in the urban area a major effort to redress car dependency is urgently needed.

Integrated Local Transport Planning
It is intended that an Integrated Transport System will include the following:

- High Quality Rail Commuter Services.
- Quality Bus Services in Dedicated Bus Corridors (possibly light rail in long term).
- Integrated Ticketing , Improved Stations and Bus facilities.
- High Quality Interchange Facilities between road, rail and bus.
- Park and Ride Strategies.
- High Quality Road Access on National Routes.
- An Adequate and Managed Supply of Car Parking.
- Traffic Management and Car restraint in City Centre Areas.
- Local Area Transport Plans including Plans for rural areas.
- Commuter Planning for Large Employers. and
- Large Developments linked to Public Transport Availability.

The benefits of the development of an Integrated Transport System include improving the accessibility of areas where employment, services, recreation and leisure facilities are available. An integrated transport system offers a choice of transport mode which will empower people by giving them the freedom to make more and new choices in the management of their daily lives. The global time savings achieved by a better management of the transport network will translate into a wide range of benefits including improved access to health and social services, for example, or improved access to leisure opportunities. All these improvements in the range of people's daily choices will lead to a real and perceptible improvement in the individual and community quality of life for the people of Cork.

Consideration will be given to requiring developers and employers to implement Green Commuter Plans and Mobility Management Plans, which must actively encourage the use of non car modes including bus, train, car sharing, cycling and walking for both travel to work and other work based trips. A sample Green Commuter Plan will be included in the authorities development plans.

A range of measures to improve traffic conditions will be encouraged, which could include:

- Piloting alternative school opening hours at key locations.
- Establishing car pooling initiatives; and
- Piloting walking to school initiatives.

These benefits will be achieved without significant adverse impact on the environment, either at a local level through increased congestion, noise and

2:

The Proposed Strategy

Ballincollig:

- Quality bus corridor and green route to the city, possible upgrading to guided bus way in the long term.
- Park & Ride at Bandon Road Roundabout.
- Relocation of road space in town to buses, cycles and pedestrians when bypass opens and through traffic removed.
- Local transport plan for town and its hinterland.

Carrigaline:

- Quality bus corridor and green route to the city.
- Park & Ride at Kinsale Road Roundabout in the short term.
- Park & Ride at Carrigaline in the longer term.
- Upgrading of N28 route to city and ring road.
- Local transport plan for Carrigaline/ Ringaskiddy

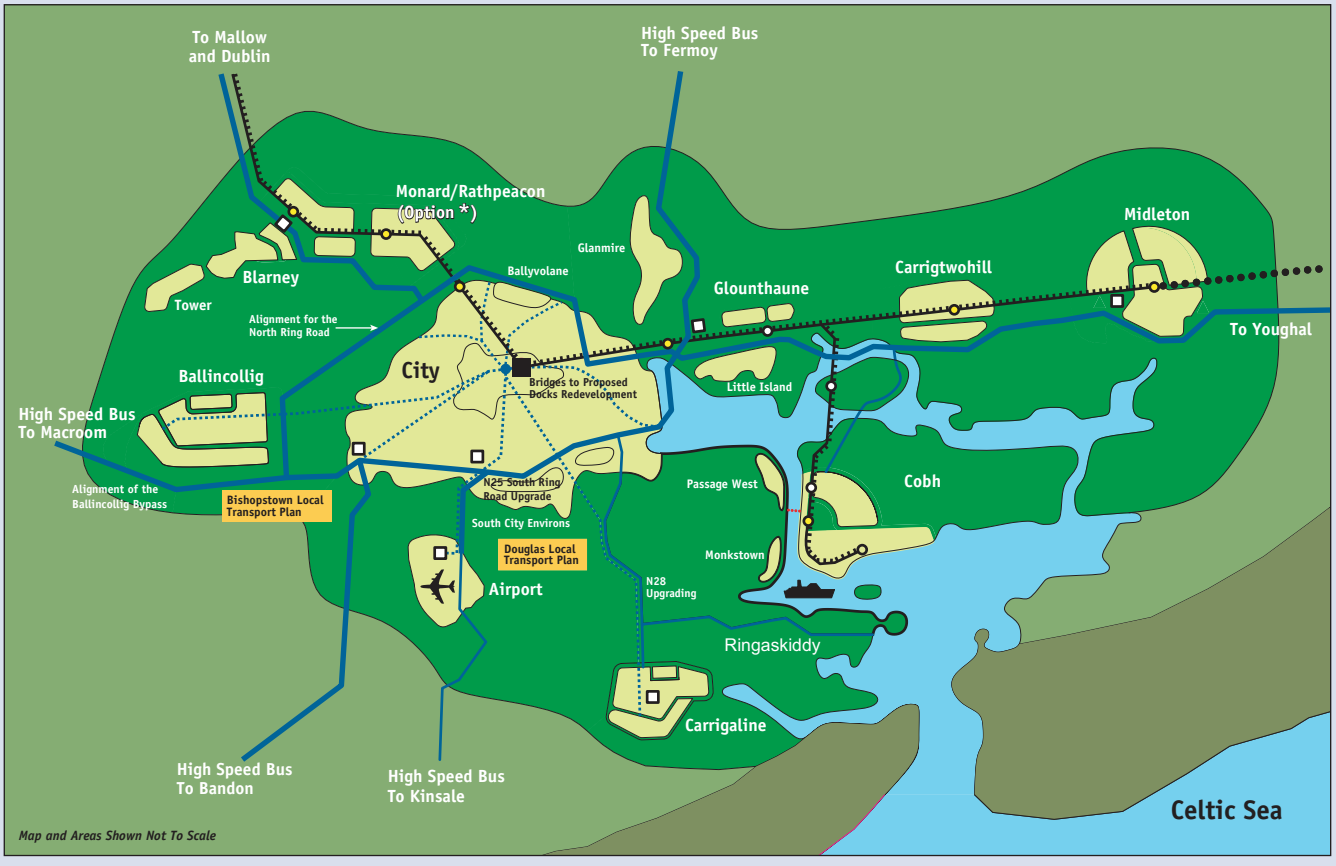
Midleton:

- Railway re opened, new railway station
- Feeder buses, walk & cycle links to station
- Improved and extended local road network to serve development areas.
- Reduction of traffic and traffic impact in town centre.
- Local transport plan for town and hinterland.

Cobh:

- Enhanced rail service
- New Park & Ride station at Ballynoe
- Possible bus/ferry link to Ringaskiddy
- Local transport plan for town and its hinterland.

Figure 2.7 **Transport Strategy for Metropolitan Cork**



pollution, or a global level through increased energy consumption. This will be an inherent part of the planning of a sustainable transport system. The principal proposals for Metropolitan Cork and the Ring Towns are indicated in Figures 2.7. and 2.8

Objectives and Targeted Outcomes of Integrated Transport System

The immediate strategic objective of the integrated transport system is to create conditions that will facilitate a change in public attitudes towards the use of public transport. This is seen as a strategic necessity not only for reasons of environmental sustainability, but also to be able to accommodate the growth in demand for transport that accompanies economic growth and expansion. Research carried out as part of the study indicated that there will be an 81 per cent growth in the demand for car travel between now and 2020. If this growth is not addressed in an integrated way congestion will intensify and spread throughout the City and urban areas bringing average speeds down to as low as 5mph.

By emphasising the provision and expansion of public transport we accommodate growth in a sustainable way and contribute to the overall quality of life for all by improving accessibility, access, reliability and choice. The attached Figure 2.9 shows that motorised public transport provides for 19,750 trips or 22.8% of all travel demand in 2000. Rail travel has a share of 0.5% or 439 trips in the morning and peak rush hour. By 2020 public transport will have increased its share of travel demand by a further 19,000 trips in the morning peak hour, bringing considerable relief to congestion caused by car based traffic. Travel demand on rail services will increase from 450 trips to 7650 trips in the morning peak rush hour, an increase of 17-fold.

The switch from car based travel to public transport, known as the modal shift or switch will be in the order of 7,500 trips in the morning peak rush hour representing some 7.5% of total car demand in the CASP study area in 2020. This equates to 34% of the increase in car based travel demand over the period of the study. Along the upgraded public transport corridors themselves such as the rail or QBC corridors, the scale of the modal shift will be significantly higher, being 14% of all demand in the city area and up to 29% of all trips going to or from the city centre (see Figure 2.10).

Our research shows that these targets are achievable if the strategy is implemented as part of an integrated transport system that is closely co-ordinated with the land use and planning strategies. These targets are set as a minimum, and would be reviewed regularly to ensure that the modal shift away from the private car is as high as possible.

Legend

- Railway
- Potential Railway
- Future Railway Station
- Existing Railway Station
- Quality Bus
- Major Roads
- Minor Roads
- Park + Ride
- Kent Station Interchange
- Port of Cork
- Cork Airport

This plan is NOT intended to be site specific and indicates possible broad locations for future development.

2:
The Proposed Strategy

Macroom:	Mallow:	Bandon:	Kinsale:
• Options for bypass being studied (NRA). • Frequent, high quality bus to Cork. • Town centre improvements post bypass. • Local transport plan for town and hinterland.	• Upgraded rail service. • Rail based Park & Ride, possible new road to north of town. • Local transport plan for town and hinterland.	• Southern Relief Road by year 2001. • 2nd bridge to be studied. • Frequent, high quality bus to Cork. • Town centre traffic and environmental improvements. • Local transport plan for town and hinterland.	• Frequent, High quality bus to Cork. • Reduction of traffic and traffic impact in town centre. • Park and Ride scheme to serve Kinsale. • Local transport plan for town and hinterland.

Figure 2.8 **Transport Schemes in Rural Areas and Towns**

Fermoy:

- Bypass due by year 2005.
- Frequent, high quality bus to Cork.
- Town centre improvements post bypass.
- Local transport plan for town and hinterland.

Youghal:

- Bypass due by year 2003.
- Future rail link to Midleton.
- Feeder buses to station.
- Town centre improvements post bypass.
- Local transport plan for town and hinterland.

Legend

Public Transport

"Total Journey Quality"

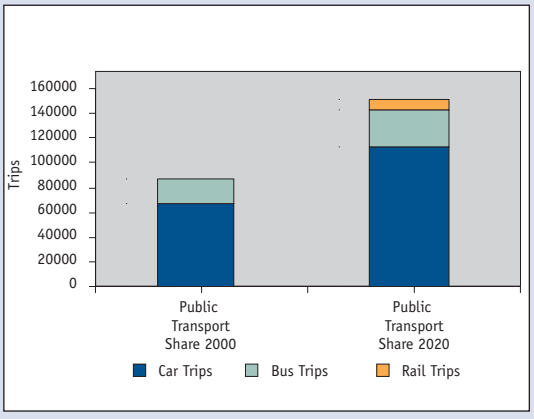
The development of a high quality, 'state of the art' public transport system is central to the achievement of an Integrated Transport System for Cork. It will provide key improvements in terms of access and accessibility. The planning of all public transport services will be based on the principal of "Total Journey Quality". This concept is widely applied in the development of quality bus services, which means more new and improved buses, more frequent services, improved reliability, low floor buses, improved timetabling and availability and distribution of timetable information. The ultimate aim is to improve frequency and reliability so that the need for printed timetables becomes superfluous to regular users. However, the principle of the whole door-to-door travel experience applies equally to rail, and is central to the philosophy of an Integrated Transport System.

Integrated ticketing, whereby a single ticket system is valid for all types of public transport, will be a vital component of the improved system. To be effective, this will require smart card ticketing and the most appropriate system will need to be studied and agreed by the relevant transport operators.

Equally significant is the need to provide integrated, well displayed information for all travel modes and Park and Ride facilities. The information system must be easily accessible at all points of embarkation, and via phone and internet, in order to enable people to plan their journeys more easily.

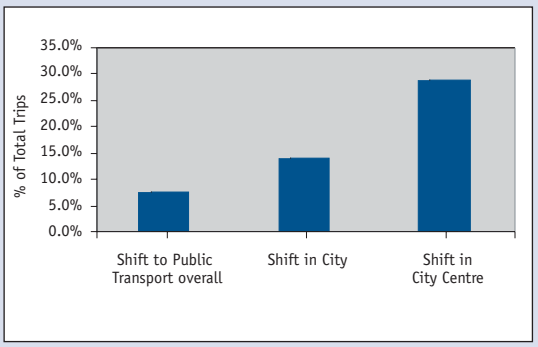
The whole experience of using Public Transport will be transformed and made more appealing, attractive and exciting for all potential users. A positive marketing approach will play an important role in changing the perception of public transport. Public attitudes can and do change, and a marketing campaign, possibly targeted at younger people, could greatly improve the image of buses and trains over cars.

Figure 2.9 **Change in Modal Share**



2: The Proposed Strategy

Figure 2.10 **Modal Shift in 2020**



Green Routes
A network of Green Routes will be developed. Green Routes will be high quality, high profile public transport corridors where the emphasis will be on providing high quality bus services in dedicated road space with suitable priority in the traffic management systems to bias in favour of the movement of large numbers of people rather than large volumes of vehicles. The planning and implementation of these Green Routes will incorporate improved footpath spaces and separation and protection of pedestrians from traffic streams as well as the provision of dedicated road space for cycle lanes and cycle tracks.

Waiting facilities at bus stops including the provision of real time information will be greatly improved and boarding facilities will be improved for the mobility impaired by providing higher bus boarding platforms to match the low floor buses. The planning benefit of these Green Routes will include a more focused direction of resources on the specific network of high grade corridors where the end user benefits are shared by the greatest number of people.

Speeds for buses on the Green Routes and routes from the Park and Ride will be as fast as possible. Over time, an increasing level of priority will be given to buses so that they can maintain reliability, speed and competitiveness as congestion builds up. The priority measures chosen will be tailored to the characteristics and requirements of each route. For example, a fully segregated guided bus-way may be possible on the South City Link Road, whereas measures on the Douglas Road may be limited to improving footways, crossings, bus stopping arrangements and priority at junctions.

Overall, the strategy proposes the introduction of 9 Green Routes to include the main existing bus routes, and corridors serving Park and Ride sites that will be developed at the Kinsale Road Roundabout, the Bandon Road Roundabout and in Carrigaline.

Orbital Routes
Following on from the Committee on Public Transport's Report in 1999, CASP also envisages the development of orbital bus routes around the Metropolitan Area as a key component of the integrated public transport system.

Bus Services to the Ring Towns and Rural Areas
High frequency bus services will be introduced between the Ring Towns and the City. These services will integrate with the City services at the Park and

Ride sites and will be able to avail of the priority and timesavings of the Green Routes on the last leg of the journey into the city centre. It is intended that high frequency services will be introduced to the towns of Kinsale, Bandon, Macroom and Fermoy along radial road corridors not served by rail. These high frequency routes will benefit from the planned development of dedicated public transport corridors on the major radial roads approaching the city as well as on the orbital routes.

Other bus services in the Ring Towns and the rural areas will be introduced as required as part of the local integrated transport plans.

Commuter Rail Services

The provision of commuter rail services will be substantially upgraded with the reopening of the rail line to Carrigtwohill and Midleton, the introduction of new services from Mallow and Blarney into Cork, and the upgrading of the rolling stock and frequency on the Cobh rail service as the demand increases over time. The provision of a service to Youghal may be feasible in the longer term and this will be kept under review.

New track and signalling will be required along the disused alignment from Glounthaune to Midleton. The scheme includes new stations at Carrigtwohill, and Midleton. An additional station may be required to cater for Park and Ride demand at a suitable location close to Dunkettle. On the Cobh branch, a new station will be opened at Ballynoe.

The new commuter service to the north of the City will use the existing mainline rail between Cork and Mallow. Three new stations are planned at Kilbarry, Monard/Rathpeacon, and a Park and Ride station is planned to the north of Blarney, possibly near the former Blarney station.

Kent Station will be redeveloped as a major partnership between Iarnrod Eireann, private developers and the City Council. The redevelopment will include:

- The reconfiguration of the platforms to allow through-running of trains from the Mallow line to the Cobh and Midleton lines.
- Better integration of the station with the City centre and Docks by providing the main entrance to the south with safe and direct walk links to the City and fast reliable bus links to the City and major destinations.
- Multi-modal interchange between rail and foot, bicycle, bus and car.

During the morning peak period the following rail service frequency is proposed, subject to detailed feasibility studies:

Indicative Train Service Frequencies

Mallow - Blarney	Hourly, then every 30 minutes in the longer term
Blarney - Cork	Every 15 minutes
Cork - Glounthaune	Every 15 minutes initially, then every 7.5 minutes in the longer term
Glounthaune - Cobh	Every 30 minutes, then every 15 minutes in the longer term
Glounthaune - Midleton	Every 30 minutes, then every 15 minutes in the longer term

Figure 2.11 **Total Journey Quality**

Cork City-Link Quality Bus in the Cork City Area

A New Travel Concept for Cork

The new Cork City Link is NOT just an upgraded bus service
Cork City Link is a completely new concept that provides for ALL of the customer's needs from fireside to office desk, factory floor or shop counter!

Component	Customer Needs	City Link will develop in one bus service
The Enquiry	How do I know about City Link?	ƒ High quality route information leaflets/cards ƒ Information on internet/mobiles ƒ Displays on and off site ƒ Links to transport hot line ƒ Information on ceefax/teletext
The Walk	How do I get to the City Link?	ƒ Footpaths safe, short and well signed ƒ City Links stops at convenient focal points
The Wait	Where will I wait for the City Link? Will it be uncomfortable? Will I be bored, frightened or unsure?	ƒ High quality, visible stops ƒ City Link stops integrated with shops ƒ Local information display ƒ Comfort and access for all ƒ Lighting and security ƒ Telephone ƒ Boarding - easy access ƒ Real time information
The Ride	What is the City Link service? How much will I pay and how? Will I be able to get on board Will the staff be friendly and efficient? Will it be a quick journey Will it be held up by other traffic?	ƒ Service is frequent ƒ Service is reliable ƒ Payment off vehicle ƒ Attractive prices ƒ Level boarding, raised platforms ƒ Comfortable interior ƒ Staff trained in efficiency ƒ Customer care a priority ƒ Routes match customer needs ƒ Speed ƒ Priority to City link, ƒ Visible advantage
The Walk	Will it take me right to where I need?	ƒ Access to City centre ƒ Easy link cross centre ƒ Advantage created
IMAGE	Will I WANT to ride the City Link?	ƒ High design standards to all elements ƒ Strong branding ƒ Major promotion programme

A substantial increase in Rail Patronage in Metropolitan Cork is forecast as follows:

Table 2.4 **Forecast Rail Patronage in Metropolitan Cork**

	2000	2006	2013	2020
Daily Patronage	3,000	16,300	24,100	30,900
Yearly Patronage	800,000	4,300,000	6,400,000	8,200,000

A financial analysis of the proposed metropolitan rail system over 30 years from 2006 estimates an overall operating loss of €28m (costs of €225m, Revenue €197m). The initial Cost Benefit Analysis, however, indicates that there is a marginal net positive benefit largely due to the significant time savings for car drivers from reduced urban congestion. (Further details of the Cost Benefit Analysis are summarised in Appendix P).

It is important to emphasise that the benefits of investment in the improved rail system for Metropolitan Cork depends upon development along the rail corridors going ahead as proposed in CASP. It is recommended that a further study be undertaken to provide a detailed assessment of the alternative locations for stations with relation to land use development and rail operation and service requirements, including integration with existing Inter-City services, patronage demand and financial appraisal.

Future Expansion of Rail and Light Rail Services
The economic development of heavy and light rail services is very dependent upon having sufficiently high population densities close to potential routes to support frequent, high volume services. Although present forecast demand does not support the further extension or construction of new routes, a review of the situation is proposed at the CASP mid term review. In the meantime, it is important that potential rail or light rail corridors are not severed or blocked by development.

In developing the high quality bus corridors, such as that proposed between Ballincollig and Mahon via the City Centre and Docklands, the possibility of upgrading to light rail in the long term should be considered at the planning stage. The planning and development of all major orbital and radial roads, including the N8, N22, N25, N27, N28, N71 should consider the future need to accommodate dedicated public transport corridors in urban areas.

Intercity Rail Services
An hourly high speed service to Dublin will be developed, and links to Limerick and Kerry connecting with these hourly services will be enhanced. The upgrading and recasting of Kent Station will provide a catalyst for the further development of rail services to and from Cork.

Intercity rail plays an important role in the sound economic development of Cork City and County by providing high capacity direct public transport links with Dublin and all stations in between, and with Limerick and Kerry through connections made at Mallow and Limerick Junction.

In excess of three million seats are on offer per year on the Cork/Dublin route. The further development of the Intercity Cork/Dublin route will include faster journey times and the provision of additional intercity rolling stock.

Waterbuses and Ferries
Waterbuses will be encouraged as tourist or leisure oriented ventures, possibly as part of the redevelopment of the Docks, and also welcomed as part of Green Commuter Plans developed by or in partnership with the major employers in the Harbour.

The existing Passage West Ferry will continue to play an important role, bolstered by the proposed Ballynoe Station on Great Island, providing easy access between the rail network and Passage West.

2:

The Proposed Strategy

Park and Ride Strategy

Park and Ride sites will be located on all of the major radial roads into Cork City. These will offer a choice to car users to change from their cars into public transport at an appropriate location on the edge of the City. This will have the benefit of reducing the number of cars entering the City and will hence ease congestion.

Bus based Park and Ride sites will be located near the Kinsale Road Roundabout and at the Bandon Road Roundabout, where high frequency dedicated bus services will bring passengers into the City along the green route corridors. This will provide a choice of travel mode for commuters on the N22, N71 and N28 and Airport routes. Other bus based Park and Ride sites will be developed at Carrigaline in the longer term.

Rail based Park and Ride sites will be developed at Midleton and at one of the new stations to the North of the City, possibly at Blarney. These will provide a choice of travel mode to commuters on the N25 and N20 corridors. A Park and Ride requirement has been identified for the Dunkettle area to provide for commuters on the N8 and N25 approaches to the City. The location, configuration and operation of each of these Park and Ride sites will be verified by more detailed studies.

Cycling

As part of the programme to promote public transport and reduce car dependency, the proposed Green Routes network will be promoted as safe and accessible for cyclists. A cycling initiative will address the decline in cycling, in partnership with organisations with an interest in the promotion of cycling both for local transport, and for leisure/tourism. The approach will promote the use of the improved infrastructure to be offered by the Green Routes, greater integration with public transport, education/training and marketing. Bicycle parking will be provided on this network, and at key destinations in the City centre and towns. Within their Commuter Plans (or Mobility Management Plans), major employers will provide measures to ensure safe access to the work place by bicycle and will provide secure bicycle parking/ storage. Development Control policies to reflect this through planning conditions will be applied.

Cycling is cost-effective, non-polluting, reduces congestion in urban areas, fosters improved health, and is accessible to young people. In 1986, some 8.2 per cent of all trips in the Study Area were made by bicycle. By 1996, this proportion had fallen to 3.1 per cent. It will be an objective of this Plan to increase cycle use to 10 per cent of all journeys by 2020, through such measures as the development of 50km of dedicated cycleways in Cork City.

In common with cyclists, motorcyclists are vulnerable road users and require specific consideration. They are also more efficient road users than low-occupancy cars and as such justify some priority.

Walking
Walking is cost-effective, healthy, non-polluting and reduces congestion. Most trips, even by car, have a walking component. As an activity in its own right, walking improves residents and visitors enjoyment of both the City and the countryside. Enhancement of the pedestrian environment is a cornerstone of any successful urban renewal initiative.

Initiatives such as the Walking to Schools project could be introduced throughout the Study Area in conjunction with the Department of Education.

The Mobility and Visually Impaired
A central part of the Integrated Transport System philosophy is the improvement of access and accessibility for all. The provision of suitable facilities for all transport users, whatever their physical ability, will be mainstreamed within the planning design and operation of all transport services, particularly where these issues may not have been given prominence to date.

Road Transport
Strategic Roads
Road improvements will be carried out as part of the Integrated Transport System. This means that their planning and provision will be co-ordinated with the provision of other transport modes.

There is a considerable amount of committed road planning underway at present in the Study Area. The National Roads Authority (NRA), in conjunction with the local authorities, has proposals to upgrade all the radial routes into and out of Cork, and to upgrade the South Ring Road (shown in Figure 2.7). These proposals have been included in the transport strategy. In the case of bypass schemes, for example the Ballincollig bypass or the Blackpool bypass, there is the opportunity to reallocate space to public transport and non-car uses on the former routes (e.g. the N22 in the case of Ballincollig). Where improvements are "online", for example the upgrading of the N28 from Carrigaline/Ringaskiddy, requirements for buses, (including quality bus corridors and guideways), cyclists and pedestrians should be incorporated into the design. Such provisions could include the purchase of a slightly wider road reservation as part of the CPO process to enable the hard shoulder to be converted to a dedicated bus lane in the future (and possible future upgrading to light rail.) In addition, the design of the routes could include provision for priority treatment of public transport vehicles at junctions and interchanges. This might include the widening of interchange ramps for future bus-lanes. The location and accommodation of dedicated access to proposed park and ride facilities also needs consideration when planning such routes.

As noted in the North and West Strategic Study, the importance of access to and from the south and west areas of County Cork, to the ferry ports and to the airport is acknowledged. The improvements to the N71 as set out in the Road Needs Study, the improvement of the R586 and the upgrading of the N22 are considered a significant requirement of the transport policy to achieve balanced development of the Ring Towns.

2: The Proposed Strategy

A North West Link crossing the River Lee and linking the N22 (Cork – Killarney road) to the N20 (Cork – Limerick road) and eventually to the N8 (Cork – Dublin road) is also at the early stages of planning. Consideration of a dedicated public transport right of way along this road including the possibility of dedicated bus lanes and future upgrading of these to light rail should be included in the terms of reference for the study.

As part of the planning and design of the proposed North West Link, safeguards will need to be put in place to protect the integrity of the Strategic Plan, as the Plan does not propose development along the new road in the Lee Valley or between the Lee Valley and the urban area.

A new road bridge across the River Lee is proposed to provide access to the Docks redevelopment as part of the master plan study for that area, which will need to be investigated and integrated with the North West Link proposals. In particular, junction arrangements on the N8 will require careful consideration. To avoid the introduction of additional traffic into the City centre, there will be no connection from this bridge through the Docks to the City centre.

Pedestrian linkages between the northern and southern banks of the river, and the Point on the Island, should be vital components of the Docks Project, and need to be progressed early in the development.

Traffic Management Parking and Car Restraint
The introduction of an integrated transport system will include significant initiatives for the management of the demand for road based travel. These initiatives will be operated in tandem and in co-ordination with the improvements to the provision of public transport network. The three key management tools are: traffic management, parking management, and car restraint.

The reduction in car use and car dependency will be achieved through a broad and well managed policy mix of initiatives including better public transport supply, improved landuse planning, traffic management and parking supply management.
A number of key flagship projects in transportation terms will be required to act as a catalyst for change. This will include the rail improvements, quality bus corridors or the significant investment in upgrading of the public realm, which incorporates parking restraint and strict traffic management measures and improvements to pedestrian facilities.

Traffic management measures will include measures to control the speeds and volumes of traffic in the road network in the City centre and in urban areas generally. The design and implementation of such measures can be incorporated within an overall programme for upgrading of streetscapes and improving the fabric and appearance of the public realm. The careful planning and use of the City's network management system can yield significant benefits, and some initiatives in this regard are already in advanced planning.

The City Council has an on-going programme to upgrade the pedestrian environment in the City, which includes gradually changing many of the one-way systems to two-way working. This will reduce the capacity of the City Centre road network, acting as a traffic restraint measure; however, it is important that bus operations and bus journey times are not penalised in this process. Instead, opportunities to benefit buses should be identified and realised.

The provision and management of car parking raises two issues which need to be balanced. Firstly, reduced parking availability in certain locations will improve the pedestrian environment locally. More generally, reduced parking availability (or increased charges) is a powerful car restraint measure. More than any other single measure it will encourage a transfer to other modes. It is vital that parking management is closely linked with the introduction of public transport alternatives so that the number of people attracted to the City and urban areas is not diminished.

The second issue is that parking availability and economic viability and vitality are closely linked. A very vibrant centre with little competition can afford and will want a strict parking policy. This will enhance the pedestrian environment and increase public enjoyment and spending. Cork City centre should aspire to this position. In the interim, the City centre competes with other city centres and larger suburban centres, where there is ample parking.

For these reasons, parking policy should be determined at a local level, in consultation with local businesses and residents. At a strategic level, however, parking policy needs to be used as a tool to achieve the objective of reduced car dependency.

Local parking policies will need to be determined urgently. With the increase in population and employment, the demand for parking will escalate rapidly, resulting in traffic management problems. Detailed consideration must be given to managing existing parking supply so as to support the car restraint policy and the proposed public transport measures; although it is noted that there is still ample spare capacity in the City's multi-storey car parks. Enforcement will be a critical component of parking management.

For new City centre developments, only a minimal level of operational parking (space for deliveries and visitors, not for commuters) should be provided, in tandem with strict parking controls for the surrounding streets. New car parks should not be located on the Island, and these provisions should be carefully controlled elsewhere in the City centre.

Port

The Cork Area Strategic Plan and the Port of Cork's Strategic Development Plan are mutually reinforcing. Effective partnership of Cork City Council, Cork County Council and the Port of Cork is essential to the accomplishment of the both strategies.

Within its Strategic Development Plan, the Port of Cork seeks to have the following sites included in the Cork Area Strategic Plan as areas for port use:

- Curlane Point, adjacent to Spike Island.
- Oyster Bank, Ringaskiddy.
- Ringaskiddy ADM Jetty.
- Ringaskiddy Basin.
- Dunkettle.
- Marino Point.

In the short term, the Port of Cork plans to improve throughput at Tivoli and Ringaskiddy Deepwater Basin; to consolidate Dry and Liquid Bulks at Ringaskiddy; to develop a quarter ramp berth at Ringaskiddy Basin next to the Ferry Terminal; and to develop Dunkettle for logistical use.

In the medium term, Curlane Bank and Oyster Bank would be developed, and facilities at Ringaskiddy would be redeveloped to accommodate forecast growth in Dry Bulks, other growth markets and displaced City Quays trades. Should the development of Curlane Bank be unachievable, containers should be relocated from Tivoli to a new terminal at Oyster Bank, Ringaskiddy or Marino Point.

The Port of Cork contributes significantly to the well being of commerce, industry and tourism, not just of the Cork sub-region, but beyond, to the entire country. It impacts greatly on the heritage, cultural, environmental and recreational character of its hinterland. The Port of Cork is committed to its responsibility for promoting and regulating water based leisure facilities and activities. It is important that the harbour is utilised efficiently, enjoyed and managed for the benefit of all.

Airport

The development and expansion of Cork Airport is crucial to the development and future prosperity of Cork. The economic development of the region will depend on inward investment and in-migration of labour. Continued improvements in air links and ease of access to the UK and European hubs is essential to fostering and promoting the Cork region as a high quality destination for inward investment and tourism.

Air services to and from Cork Airport currently provide vital links for business and tourism, and play a key role in attracting and retaining inward investment. Air freight is important for high value and perishable products. Owing to increased local prosperity and the introduction of low-cost airlines, residents of the Cork area increasingly use the airport to access a wider range of social, cultural and leisure opportunities than is available locally. The airport's business is growing rapidly. Aer Rianta has prepared an Airport Development Plan based on ambitious growth forecasts (6.2 per cent per annum to 2010).

The area immediately adjacent to the airport is a key location for employment uses that would depend upon the proximity of the Airport for their viability. Potential uses are identified later in this chapter. The unique proximity value of lands adjacent to the Airport (and similarly for the Port) should be taken into consideration in the siting of developments at these locations.

A quality bus corridor from the airport to the City centre and Kent Station will be developed with a high frequency service. Swift journey times and reliability will be ensured by the introduction of priority measures at the Kinsale Road Roundabout and the South City Link. Delays at the Kinsale Road Roundabout will also be reduced by the proposed junction improvement currently under design (NRA/ County Council/ Cork City Council).

2.6 Land Use Proposals

Housing Location

The spatial strategy outlined in previous sections seeks to direct economic and population growth to those areas best able to accommodate it. The policy underpinning this is predicated upon sustainable development principles and the study goals and objectives. New housing provision and employment locations will be strongly linked with land use and transport.

The City

In Cork City, it is considered that the demand for new housing can be met through a variety of measures, including:

- Developing vacant sites.
- Redeveloping redundant or relocating industrial uses.
- Rehabilitation and more intensive reuse of under-utilised older buildings, (e.g. living over the shop scheme).
- Rehabilitation and, where appropriate, redevelopment of run-down residential areas.
- Infilling and enhancement of existing centres.

It is estimated that 11,090 new housing units can be accommodated in the City over the next 20 years. A summary of the proposed distribution of new housing units in the City is given in Table 2.5, and is based upon existing planning schemes, broad estimates of potential infill, densification and redevelopment opportunities including major growth opportunities in the Docklands. Population and household forecasts, upon which this demand is based, are given in Appendix G. The total land estimated to be available for housing or mixed use schemes in the City over the next 20 years is thought likely to be at least 200 hectares. This is considered adequate to meet the following housing target.

Table 2.5 **Distribution of New Dwellings in the City**

Location	Additional No. Dwellings to Year 2020		
	Population	Households	Dwellings
Central Cork	2,070	600	700
Northeast Cork	-2,740	2,000	2,390
Northwest Cork	-290	1,300	1,670
Southwest Cork	-2,510	300	760
Southeast Cork	10,000	4,930	5,460
Total for City Proper	**12,010**	**9,130**	**11,090**
Possible Additional Housing Demand arising from the National Spatial Strategy			1,000

Metropolitan Cork

It is estimated that 32,870 new housing units will be required in the Metropolitan area. The proposed distribution of new housing in Metropolitan Cork is summarised in Table 2.6. (See also Appendix G.) The total area of land required for housing in Metropolitan Cork will depend upon the residential densities achieved.

At an average net density of 35 dwellings per hectare, (i.e. at the lower end of Government recommended target densities for outer suburban/Greenfield sites) a total of about 890 hectares of housing land will be required. If average densities are not increased above the current low densities, a total of about 1,560 hectares of land will be needed for residential use. This will have implications for the cost of providing infrastructure, and the area of agricultural land lost to urban uses.

The capacity of the Plan to accommodate the forecast growth is based upon the lower range density housing, so it represents a conservative estimate of capacity. If higher densities are achieved as recommended, Metropolitan Cork could house a substantially greater population than that currently planned, (or alternatively more farmland preserved).

Additional land to provide community facilities such as schools, public parks and distributor roads will add upwards of an additional 25 per cent land requirement to these net density figures.

Ring Towns and Rural Areas

Growth in the rural areas will be broadly jobs-driven and housing permissions will be restrained, with at most a five-year advance supply of housing provision. It is estimated that 12,310 new housing units will be required in the Ring Towns and the rural areas over the next 20 years. Table 2.7 indicates the housing distribution for the Ring Towns and rural areas, which suggest a total requirement for between 380 and 570 hectares of residential land based upon similar assumptions to those used in Metropolitan Cork. (See Appendix G for background population and household data.)

Table 2.6 **Distribution of New Dwellings in Metropolitan Cork**

Location	Additional No. Dwellings to Year 2020		
	Population	Households	Dwellings
Midleton Town	12,350	5,300	5,740
Glounthaune & Little Island	400	300	380
Carrigtwohill & Midleton	10,570	4,680	5,090
Cobh Town	3,460	2,000	2,260
Whitegate/Aghada	-80	160	190
Carrigaline & Ringaskiddy	4,000	2,200	2,490
Crosshaven/Myrtleville	980	550	630
Carrigaline Hinterland	-30	150	200
Douglas and South City Environs	2,390	2,300	2,700
Monkstown & Passage	960	650	760
Ballincollig & its Hinterland	2,840	3,000	3,450
Monard/Rathpeacon/ Whitechurch	13,070	5,100	5,380
Blarney and its Hinterland	90	1,290	1,550
Glanmire/Riverstown	970	830	930
Ballyvolane	1,040	1,000	1,120
Total for Metropolitan Cork	**53,010**	**29,510**	**32,870**
Possible Additional Housing Development arising from the National Spatial Strategy.			3,710

A considerable amount of land has already been allocated for residential and industrial development throughout the rural areas, far in excess of that required to meet the housing requirements of the rural population. Much of the land is unserviced, and without planning permission. It is therefore proposed that further zoning of land for development in such villages be curtailed. Consideration in come cases may be given to reducing the amount of zoned land.

Retail Location

Background

The City and the County Council are currently preparing a joint strategic retail study. The following guidance on retail location is therefore indicative and should be subject to monitoring and review.

Location of Retail Centres

Locations for new retail centres will be subject to the conclusions of the Joint Retail Strategy Study. In addition to the City centre, these might be as follows:

- Major centres would be expected to locate in the Blarney and Midleton areas. Each location could include two superstores, one comparison retail project and a retail park by 2020.
- Medium size retail centres would locate at Mallow, Ballincollig, Ballyvolane and Carrigtwohill. One superstore and one comparison centre would be located at each centre, whilst Carrigtwohill and Ballincollig might develop a retail park.
- Minor retail centres are expected to develop at Fermoy, Youghal, Bandon, Carrigaline, Hollyhill and Cobh, each comprising one superstore or supermarket.

Table 2.7 **Distribution of New Dwellings in the Ring Towns and Rural Areas**

Location	Additional No. Dwellings to Year 2020		
	Population	Households	Dwellings
Youghal Hinterland	190	700	840
Youghal Town	2,240	1,260	1,410
Kinsale Hinterland	-460	240	300
Kinsale Town	-20	170	230
Bandon Hinterland	-1,380	280	390
Bandon Town	1,000	830	970
Macroom Hinterland	1,170	260	360
Macroom Town	2,070	920	1,010
Mallow Hinterland	-11	670	800
Mallow Town	7,510	3,200	3,510
Fermoy Hinterland	-230	650	810
Fermoy Town	3,210	1,510	1,680
Total for Ring Towns & Rural Areas	**13,030**	**10,690**	**12,310**
Possible Additional Housing Development arising from the National Spatial Strategy.			1,290

It is, however, important to stress the need for in-depth study, and that phasing of retail development in relation to housing growth should be directed in a sensitive way and regularly reviewed.

Employment Location

Location and Numbers of New Jobs

It is estimated that 46,370 new jobs will be created over the next 20 years. This is in addition to the 155,000 jobs that are supported by current economic activity. The proposed strategy sets out what is considered the optimal distribution of these potential jobs between the different parts of the Study Area while remaining true to the Vision for Cork and the key concepts of the strategy. The location of employment will be strongly linked with the provision of housing and the availability of public transport.

There will be over 16,000 new jobs in the City - many of them in the redeveloped Docklands, but also elsewhere, notably in the northwest and northeast of the City. The revitalised commercial heart of the City will also present opportunities for new employment creation.

The Metropolitan area will attract over 26,000 new jobs over the next 20 years. This will be predominantly linked with the provision and development of the integrated public transport system. The 4,020 new jobs to be provided in the Ring Towns and the rural areas will lead the development of these towns in terms of the provision of housing and other infrastructure. The employment in the Ring Towns is projected to offset the decline in the traditional rural employment sectors (agriculture and employment).

The forecast distribution of employment in each of the areas is given in Appendix G. At a strategic level the location for new employment is based on a number of factors, including the availability of a skilled and educated workforce, the provision of suitable housing and the provision of high quality public transport. The final important ingredient, the supply of suitable floorspace in an appropriate location is discussed in later paragraphs. At another level, the local authorities will continue to work closely with the third level institutions and the IDA and Enterprise Ireland to provide assistance and guidance to new industry on the areas best prepared in terms of workforce, housing and transport to accommodate employment generating investments. The location of these developments shall be monitored to ensure that the strategic spatial balance proposed in CASP is achieved. Similarly, the same agencies will continue to work closely to ensure that existing employment generating activities are adequately supported in terms of workforce, housing and transport.

At a planning level, the provision of housing will be related to provision of employment opportunities, particularly in the Ring Towns, in order to reinforce the principles of sustainable development and the reduction in the demand for work based travel. In this practical way, the policy of integrating land use planning and transport planning is put into effect.

Locations for Additional Floorspace Needs

The provision and location of new employment locations needs a supply of suitable floorspace, whether it be for office type, commercial or industrial employment. An estimated 740,000 square metres of new commercial floorspace is forecast to be required by 2020. Planning for the provision of these facilities is considered in terms of the various property market "products" that must be made available to facilitate development. It is proposed to locate this floorspace as follows:

Offices

Redevelopment of the Docklands and the Kent Station area will provide the opportunity to create a high quality mixed use zone, which will include a substantial commercial element. A total of about 100,000 square metres of prestigious, high quality space with large floor plates is proposed. Local office centres in Metropolitan Cork should be situated, as far as possible, next to rail stations and Quality Bus Corridors in both business parks and suburban centres. Similar consideration should be given to the location of local offices in the Ring Towns.

It will be important to restrain office permissions in Metropolitan Cork in order that they do not undermine the viability of the office focused regenerative initiative in the City and Ring Towns.

Business Parks

These should be located close to public transport routes in Midleton, Rathpeacon, Blarney, and near the Airport. A total of 18 hectares is estimated to be required for Business Parks, since there is already fairly generous provision of existing or granted permission in the Study Area.

2: The Proposed Strategy

Incubator Facilities
Incubator facilities have already been established at Midleton and work is underway on others at Macroom and Carrigaline. Additional facilities could be located throughout the Study Area each specialising on the strengths of the locality, for example with a technology led emphasis in the Ballincollig area and creative industries in Cobh. The land required for incubator units is relatively small (about one hectare in total) and may be particularly appropriate on brownfield sites.

Science City
A science-based technology park will require a site of about 10 hectares. A good location would be Ballincollig, where a number of sites are available within the town boundary, and relatively close to CIT, UCC, University Hospital and several research institutes, all located to the west of the City. Other good locations include the City Docklands and the north side of the City, in conjunction with plans for a new third level education facility. A detailed study would be required to assess the best site.

Distribution Space
Logistics centres require good access to transport links, therefore the existing facility at Little Island is of strategic importance and should be safeguarded for logistics use. In addition, about 43 hectares of new space will be required elsewhere. New facilities are proposed at Midleton (adjacent to the N25) and Blarney (adjacent to the N20). Specialist distribution facilities linked to air transport may be appropriately located in close proximity to the airport. Back-up port storage space is required at Ringaskiddy.

Industrial Production
High quality production facilities require relatively good road connections and sites at Ringaskiddy, Little Island, Carrigtwohill, Midleton, Monard and the airport, plus smaller sites in the Ring Towns would be the most appropriate locations. Up to 67 hectares would be required for these uses.

Port-related Industry
Port related industry, port back-up facilities and other uses that complement the port should be located at Ringaskiddy, and other land uses should be avoided in this area.

Higher Education
Cork has been a seat of learning for over a thousand years and is the focus for learning research and innovation in Cork the City-Region and in the south of Ireland. University College Cork and the Cork Institute of Technology have been critical drivers of the area's economic and social development and the NMRC Cork is one of the World's leading high tech research institutes. The role of these institutes and their active relationship with their surrounding economic and social communities is reflected in the industrial developments in the Cork area as well as the cultural, political and social vitality of the City and its people.

The strategy envisages that third level institutions will continue to play a key role in promoting Cork as an advanced location of highly educated and highly skilled people, thus promoting economic development, innovation, and attracting investment and visitors and workers from abroad.

In order to maximise access to educational opportunities for all, there is also potential to extend the existing research / knowledge zone across the River Lee to encourage area regeneration and improved social inclusion, particularly in the northern suburbs.

Tourism
The tourism profile of the area should be enhanced and expanded through the introductions of a range of new initiatives. These would include more focussed strategies to increase tourist interest in the area, for example, improved place marketing and promotion, and the identification of new attractions and improved accommodation in the City, the coast and the Ring Towns and rural areas.

The preparation of a tourist development strategy for the Study Area to address the potential for tourism and development is proposed.

Cork City
As both a visitor destination and gateway, the City should deliver an improved urban experience of culture, shopping and entertainment. A high emphasis should be placed upon leisure in urban renewal projects and an expanded programme of cultural events and interpretation of the City's heritage will be launched. As part of this campaign, Cork has been selected to become the European City of Culture for 2005. This prestigious title will give a tremendous boost to the City's tourist profile by

highlighting the City's existing rich artistic history in an extensive programme of events based upon facilities such as the Opera House, National Sculpture Factory and the Everyman Theatre. Although the City currently lacks an internationally prominent or renowned historical, cultural landmark or attraction, the programme of cultural events will increase the opportunities for Cork to develop additional visitor attractions, ideally including an attraction of national significance.

These initiatives would need to be accompanied by an increase in full serviced hotel accommodation achieved through expansion of existing properties and new builds. It is anticipated that a minimum of 400 new hotel rooms in full service hotels would be required, with each new property averaging between 80-110 rooms in size, mainly in the 3 star to 4 star category. Demand for minimum service hotels is expected to increase resulting in a requirement for an additional 500 rooms in this category, in properties of a minimum of 80 rooms each.

Harbour and Coastal Areas
The harbours and coast of the Study Area are an under-appreciated resource, and there is considerable scope to further develop their tourist potential. The main tourist destinations and service focuses for these areas are likely to be Cobh, Kinsale, and Youghal. While Kinsale is an established resort, the potential of Cobh and Youghal has yet to be realised fully.

Visitor access to Cork Harbour should be improved, and Cobh, Crosshaven and Monkstown be promoted as premium leisure sailing destinations. Specific developments in Cobh should include the creation of a distinctive ambience through enhancement and restoration of Victorian streetscapes and features, including interpretation of the Cathedral and other landmarks. In the longer term, consideration should be given to the development of tourist and leisure facilities on Spike Island if it is compatible with the development of a new container berth at Curlane Bank, and vintage steam train operation between Cork and Cobh. Greater emphasis should be given to promoting and developing the harbour as a facility for water-based sport and leisure activity.

At Youghal, encouragement should be given to the establishment of major sea-angling and watersports centres and the creation of a location for a major country market.

In Kinsale, continued development of gourmet dining, sailing and heritage is recommended and the introduction of additional attraction(s) within the town, perhaps expanding on the theme of Kinsale as an historic wine importing port.

In order to improve the appeal of these areas, a number of new resort hotels would be required. These hotels in the 4 star to 5 star category would each have a range of facilities catering to a mix of markets - for example, golf, meetings/conferences etc. Each property would have a range of leisure facilities and dining options, and should ideally be a branded product. Priority locations should be in East Cork. Modern mid-range hotels with leisure facilities would also be required, for example in Cobh and Youghal. Such properties in the 3 star to 4 star range would cater for short-break and touring markets.

This would also require an increase in the stock of visitor accommodation of the order of 60 to 75 per cent, including improved utilisation of existing accommodation and an improved seasonal spread of demand. The future is likely to see a greater polarisation of guest accommodation between serviced and unserviced categories.

Inland Areas
Most of the inland area does not have a strong tourism tradition, so a number of strategic initiatives are suggested. These could include the development of a featured attractor in each of the principal towns, small-scale high quality leisure schemes based on outdoor activities such as golf, angling and equestrian sports, walking and cycling routes and the branding of touring routes linking inland areas with City and coastal resorts. A pilot initiative might be the Blackwater Valley, which has great potential for marketing and further development for fresh water fishing, and possibly cycling and walking. Fermoy and Youghal could be promoted as centres for touring and accommodation.

In north County Cork the tourism emphasis will be on the provision of distinctive rural retreat style accommodation. This could include the provision of 4 or 5 star hotels with golf courses and leisure facilities, country house hotels and self-catering properties.

The needs of tourists should also be considered in the development of transportation infrastructure and services network.

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3: Phasing the Strategic Plan

3.1 General Approach

This chapter examines how expected development might be managed over time, and in particular, how development would be co-ordinated with the provision of new strategic infrastructure in the most efficient and economical way.

It is important to note that the phasing proposals outlined here should be regarded as an indicative framework rather than a rigid timetable. The phasing of development will need to be flexible in order to reflect changes in market conditions, which can happen suddenly and cannot be foreseen with any precision. In particular, housing targets will change – particularly in Ring Towns – as a result of the rate of job generation (or job losses), and the targets estimated here are no more than a basis for long term strategic planning. Continuous monitoring will be an essential requirement in order to ensure that the provision of serviced development land matches requirements in terms of location, quantity, and quality.

The phasing programme has been divided into three broad development tranches corresponding approximately to the following target dates: Tranche 1 *(2001-2006)*, Tranche 2 *(2007-2013)* and Tranche 3 *(2014-2020)*. Tranche 4 *(post 2020)* has also been developed to indicate the direction and implications of growth beyond the study period. The dates assigned to each development tranche are indicative only. Each tranche is intended to be self contained, so, should population growth be slower than anticipated (the low growth scenario), then investments intended to facilitate Tranche 2 would not be made until Tranche 1 is largely completed. In a low growth scenario, the completion dates for Tranche 1 would, therefore, slip by a number of years. Conversely, should demand for housing be higher than expected, i.e. the high growth scenario, development would need to be brought forward. This would mean that the release of land would be accelerated and, for example, Tranche 2 would be brought forward by one or more years.

Tranche 4 is not included in the Strategy described and quantified in Chapter 2, but has been included here to demonstrate that there is the flexibility to increase overall provision in the Study Area within the time span of the Plan.

The programme also needs to be sufficiently flexible to reflect the fact that development may not proceed evenly across the whole of the Study Area. While some areas might experience very strong economic growth and, therefore, housing demand, at the same time others may be experiencing a slowing down, caused, for example, by the unforeseen closure of a large local employment site.

Existing Zoning and Planning Situation

There is a substantial bank of land currently zoned for residential development in the current development plans for the Study Area. Only some of this land is serviced and potentially available for development, and about half of the serviced land has received planning consent or is the subject of an appeal or negotiation between the County Council and the developers. See Appendix M.

In many areas, but particularly in the rural settlements, considerably more land has been zoned for housing development than is now thought to be required, or is consistent with the proposed strategy. Much of this land is not serviced. It is proposed that many areas of zoned land will no longer be taken forward for development, and the designated land use is reviewed in the current revision of the County Development Plan in line with the Strategic Plan. In some cases, existing planning consents may also lapse and may not be renewed.

Aiming for Additional Growth

It is desirable that the emerging *National Spatial Strategy* (NSS) resolves to redirect certain high growth employment sectors to Cork. Precisely when this potential additional growth would occur is uncertain at this stage. It would not occur in the immediate short term, but it is possible that it would occur towards the end of the Tranche 1 period. On this basis, the NSS-related additional growth has been dubbed "Tranche 1 Plus" (T1+) in the programme set out below.

This potential additional growth would be welcomed. In order for the Study Area to accommodate additional growth under the NSS, the extra quantity of development expected has been included in the Cork Area Strategic Plan phasing programme. Given that the NSS is not yet determined, the additional growth assumed is purely for illustration and does not imply an upper limit. The distribution of the T1+ target takes into account the expected availability of serviced land towards the end of the Tranche 1 period. In the City, T1+ would be accommodated by increasing densities.

The trigger for phasing in the T1+ allocation would be the *National Spatial Strategy* announcing a target for Cork significantly above the medium growth targets set out in this Plan. Premature phasing of T1+ in advance of this announcement could lead to over-supply that could impact on the longer term strategy.

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General Principles

The phasing programme is based upon the following broad principals:

- Each phase of development should create a workable urban environment *even were no further tranches* to be implemented. This means that the physical form of the development, its layout, mixture of land uses, and its infrastructure and services should be functional and sustainable at the conclusion of each phase and not rely upon the completion of subsequent tranches in order to reach a satisfactory state.

- In Metropolitan Cork, growth areas should be brought rapidly to a semi-complete state before others are started. This will minimise the length of time during which the population is deprived of services and subject to the inconvenience of construction operations. Also, it will speed up the economic returns following investment.

- Within each of the Ring Towns one development zone should be largely built out before opening up the next one.

- Phasing should also follow a principle of compactness, so as to minimise the spatial spread of development (and the associated journey lengths) at each stage.

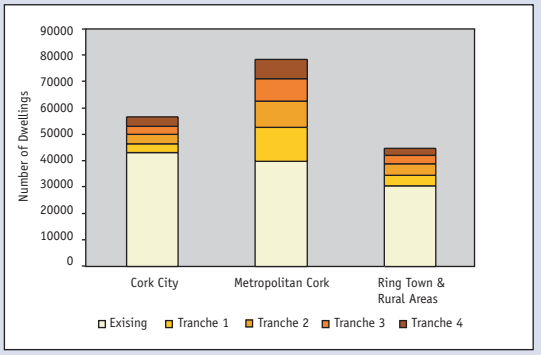
The creation of employment and retail areas should reflect the growth of adjacent housing. However, other factors will have an influence, such as market demand, the achievement of critical mass and the need to specialise. As a result, some areas may grow faster than local housing development, leading to increased travel. This can be accepted, provided that adequate transportation means have been created.

In practice, it will be advantageous to allow as much choice as is consistent with the overall strategy, and if demand levels justify it, spread growth over more than one area simultaneously. Furthermore, it will be realistic to spread development of most areas beyond their period of rapid growth, recognising gradual build-up and slow-down.

3.2 Overall Strategy

The phasing programme, shown on Table 3.1 and Figure 3.1, is designed to deliver the proposed strategy in the most efficient and economical manner. It can be seen that the development tranches are not equal but reflect a gradual slowing down in development activity over time, as the extremely strong growth now being experienced slackens to a more sustainable level over the remainder of the study period.

Figure 3.1 **Phasing Programme**



The priorities of this early part of the phasing programme are the rounding off and consolidation of existing development areas and development in areas with existing or planned infrastructure. This suggests that growth will be spread throughout the Study Area, reflecting existing planning commitments. While existing commitments suggest that the pattern of development for the first phase of development, (that is over the next 5-7 years) is already largely determined, it is possible in the first phase to begin to steer development in accordance with the long term strategic vision. This is based upon the broad principals of sustainable development and includes the efficient and economic provision of utility services and transport, the promotion of attractive economic growth poles and the fostering of a viable and equitable social infrastructure.

Table 3.1 **Phasing Programme - The Study Area**

	Current (2000) No. Households	Additional Dwellings Proposed				
		Tranche 1	T1+	Tranche 2	Tranche 3	*Tranche 4*
City	42,330	4,690	1,000	3,380	3,020	*3,590*
Metropolitan Cork	38,950	14,440	3,710	10,080	8,350	*7,460*
Ring Towns & Rural Areas	29,750	4,790	1,290	4,440	3,080	*2,690*
Total for Study Area	**111,030**	**23,920**	**6,000**	**17,900**	**14,450**	***13,740***

3.3 Phasing Programme for Metropolitan Cork

Overview

It is important to emphasise that the success of the development phasing programme for the City and Metropolitan Cork are very dependent upon the prompt delivery of a number of key infrastructure schemes.

The water treatment works at Inniscarra has sufficient spare capacity to cater for forecast demand up until the end of Tranche 1, but sewage treatment is contingent upon the treatment plant at Carrigrennan being expanded further than currently planned.

The Lower Harbour Scheme, which is currently at the initial planning stage, is also urgently required to meet existing environmental directives.

Cork County Council and Cork City Council are currently preparing to undertake a 'Strategic Plan for Water Supply'. The strategic plan for water supply will facilitate and enable the integration of the water supplies to Cork City and the surrounding county areas and make provision for the needs to service the requirements of the Strategic Development Plan. A similar strategic plan for foul sewers and surface water drainage would also be desirable to ensure integrated and co-ordinated implementation of the phasing programme.

The proposed phasing programme for the City and Metropolitan Cork are shown separately on Tables 3.2 below and 3.3 overleaf, and are discussed as follows.

Tranche 1

Development in this phase should be concentrated in areas which do not need new strategic infrastructure, already have established superstructure upon which to base expansion, are relatively close to the established centre of gravity, and will support the establishment of Phase 1 of the public transport projects.

Development is envisaged in Cork City, Ballincollig, Douglas and the South City Environs, Cobh, Midleton, Carrigtwohill and Carrigaline during this period.

In nearly all cases, the scale of development envisaged will take the key infrastructure services up to the limit of their capacity, and additional localised engineering works may be necessary to accommodate all of the planned growth. In other areas, more modest growth up to the limit of existing infrastructure provision is proposed as shown on Tables 3.2 and 3.3.

The following key road improvement schemes should be completed in this phase to facilitate the proposed development.

- N20 Blackpool Bypass-Opened 2001.
- Blarney Inner Relief Road-Possible opening 2002.
- N25 Kinsale Road Roundabout Bypass-Possible opening 2003.
- N25 Sarsfield Road Roundabout Bypass-Possible opening 2004.
- N22 Ballincollig Bypass-Possible opening 2003.

All the Green Routes and Quality Bus Corridors should be implemented with urgency during Tranche 1. By the end of Tranche 1 the whole rail scheme from Mallow to Midleton should be operational, including the redevelopment of Kent Station.

Tranche 1 Plus

If additional NSS-related growth occurred in the latter part of Tranche 1, it would be accommodated mainly in Metropolitan Cork as the Docklands site would not be fully available. This growth would be mainly targeted at Cobh, Carrigtwohill, Midleton and their hinterlands in East Cork on the basis that sanitary services and public transport will have been provided at that stage. Ballincollig would also accommodate a share, as would Carrigaline and the South City Environs, to a lesser extent.

Table 3.2 **Phasing Programme for City Proper**

	Current (2000) No. Households	Additional Dwellings Proposed				
		Tranche 1	T1+	Tranche 2	Tranche 3	*Tranche 4*
Central Cork	2,970	310	70	210	210	*210*
Northeast Cork	7,860	1,010	210	800	580	*530*
Northwest Cork	9,010	820	170	530	320	*420*
Southwest Cork	13,990	540	120	110	110	*110*
Southeast Cork	8,500	2,010	430	1,730	1,800	*2,320*
Total for City Proper	**42,330**	**4,690**	**1,000**	**3,380**	**3,020**	***3,590***

Table 3.3 **Phasing Programme for the Rest of Metropolitan Cork**

	Current (2000) No. Households	Additional Dwellings Proposed				
		Tranche 1	T1+	Tranche 2	Tranche 3	*Tranche 4*
Midleton Town	2,660	1,390	980	1,270	3,080	*3,340*
Glounthaune & Little Island	1,520	160	0	110	110	*0*
Carrigtwohill & Midleton Hinterland	2,050	2,010	780	2,230	850	*2,110*
Cobh Town	3,520	1,200	780	490	570	*1,080*
Whitegate/Aghada	670	120	230	70	0	*0*
Carrigaline & Ringaskiddy	3,210	1,740	30	470	280	*20*
Crosshaven/ Myrtleville	970	360	0	160	110	*0*
Carrigaline hinterland	1,040	200	0	0	0	*0*
Douglas and South City Env..	7,250	1,860	0	840	0	*0*
Monkstown & Passage	1,520	540	170	220	0	*240*
Ballincollig & its hinterland	6,870	2,500	190	680	270	*180*
Monard/Rathpeacon/ Whitechurch	530	340	270	2,520	2,550	*0*
Blarney and its hinterland	4,290	630	70	600	320	*180*
Glanmire & Riverstown	1,110	820	0	70	40	*0*
Ballyvolane	1,740	570	210	350	200	*310*
Total for Metropolitan Cork	**38,950**	**14,440**	**3,710**	**10,080**	**8,350**	***7,460***

Tranche 2
Redevelopment of the Docklands should be well advanced in this phase providing a strong focus for this tranche. The emphasis of growth in this period would be upon the northern arc of growth along the railway line between Blarney in the north and Carrigtwohill, and to a lesser extent Midleton in the east. A study to determine the location and phasing of this development is currently being commissioned, see Chapter 2, Metropolitan Area Structure Plan.

Development in this phase requires the extension to Inniscarra waterworks and new reservoir and trunk mains to be provided to new development areas. The Lower Harbour Sewage Treatment Scheme and the upgrading of the treatment plant at both Carrigtwohill and Midleton will also need to come on stream during this phase. The North West Link should be completed, thus further boosting the transport links to the Rathpeacon/ Monard/ Blarney area.

Tranche 3
Growth in this phase will be expected to continue along the rail corridor between Rathpeacon/Monard and Midleton and in the Docklands. This development would ensure a sustainable, high quality rail service in the area.

Tranche 4
This tranche is intended to guide the direction of development after 2020 on the basis of the forecast population growth. It would need to be brought forward into the Plan period if higher growth is experienced throughout the study period. There is sufficient capacity to accommodate Tranche 4 within the 20 years of the Plan.

It is anticipated that the bulk of the development in this phase would see further major expansion in the City Docklands and at Carrigtwohill and Midleton. Other parts of the City and Metropolitan Cork would also see further rounding off and infilling.

3.4 Phasing Programme for the Ring Towns and Rural Areas

Growth in the rural areas will be largely jobs led, and will tend to follow the provision of new employment opportunities and related strategic infrastructure provision. Most of the growth will be in the Ring Towns, and to a far lesser extent in villages. There should be a gradual but marked slowing down in development in the countryside unrelated to rural economic development. Table 3.4 shows phased dwelling estimates, which may need to be adjusted during preparation of the local plans.

Should additional development occur towards the end of Tranche 1, as a result of the NSS, a significant proportion would be allocated to the Ring Towns and rural areas, particularly in the towns and villages in the Youghal hinterland (possibly Castlemartyr or Killeagh), and the Kinsale and Bandon hinterlands.

The following key road schemes should be completed to facilitate development in Tranche 1:

- N22 Macroom-Possible opening 2005/6.
- N25 Youghal Bypass-Possible opening 2003.
- N8 Fermoy Bypass-Possible opening 2005.
- N8 Watergrasshill Bypass-Possible opening 2003.
- N71 Bandon Relief Road Main section opened 2001.

Table 3.4 **Phasing Programme for the Ring Towns and Rural Areas**

	Current (2000) No. Households	Additional Dwellings Proposed				
		Tranche 1	T1+	Tranche 2	Tranche 3	*Tranche 4*
Youghal hinterland	2,870	310	520	400	130	*160*
Youghal Town	2,400	400	0	530	480	*320*
Kinsale hinterland	1,550	180	140	60	60	*70*
Kinsale Town	1,800	90	120	60	80	*70*
Bandon hinterland	2,760	250	0	40	100	*80*
Bandon Town	2,790	410	160	290	270	*240*
Macroom hinterland	2,900	220	100	80	60	*80*
Macroom town	1,010	370	50	320	320	*100*
Mallow hinterland	2,730	300	0	270	230	*210*
Mallow Town	3,410	1,020	150	1,590	900	*640*
Fermoy hinterland	3,470	520	0	160	130	*160*
Fermoy Town	2,060	720	50	640	320	*560*
Total for Ring Towns & Rural Areas	**29,750**	**4,790**	**1,290**	**4,440**	**3,080**	***2,690***

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Mallow
The town has considerable areas of land (east of the N20 both northeast and southeast of the town), which can be serviced in the short term. This would yield a compact form. The third tranche would extend the northeast growth, and after completion of new strategic infrastructure, future growth would occur west of the N20. A second Mallow station (with Park and Ride) might be viable in Tranche 2.

Fermoy
Fermoy has land due south of the town, which requires no strategic infrastructure, and this would be developed in Tranche 1. After the completion of the bypass, and also sanitary services, later tranches would see growth to the north (as well as rounding off the southern growth).

Youghal
Youghal centre is currently congested, so that relatively slow growth is proposed in Tranche 1. After the completion of the bypass, growth would accelerate in Tranche 2 (the rail project should be reappraised at this stage to consider whether the extension to Youghal can be supported) and remain fairly steady thereafter. Town centre regeneration and traffic management would also occur in Tranche 2.

Bandon
The minor improvements in water supply are proposed for the town, and completion of the sewage network will permit planned growth in Bandon. In Tranche 1, growth should be small scale on the south of the town and served by the southern relief road, whilst later tranches could be on the north, preferably when a second bridge / western relief route is in place.

Macroom
Infrastructure service provision is good, and steady growth over the Plan period is proposed in Macroom. However, substantial development should not be started until the line of the bypass is fixed during Tranche 1.

Kinsale
Development is expected to be fairly evenly spread throughout the Plan period, reflecting the fact that growth will comprise small scale infill development. The implementation of the traffic management and related environmental improvements are expected in the early phase of the Plan, and improvements to infrastructure services are already planned.

3.5 Phasing Programme for Transport and Infrastructure

The timely provision of infrastructure is key to the implementation of the Plan. The most critical items are:

- All the Green Routes and Quality Bus Corridors.
- The rail scheme.
- Water and drainage for the north and east of the Study Area.

The overall cost of provision of the necessary transport and water services required for the plan implementation is estimated at €2.015 billion, as shown in Table 3.5.

Further details of the phasing programme for transport and other infrastructure, and corresponding budget estimates, are indicated in Appendices N and O respectively.

Table 3.5 **Summary of Infrastructure Costs 2001-2021**

	Tranches T1 (€m)	T2 (€m)	T3 (€m)	*T4* (€m)*	Total (€m)
Water & Drainage:					
- City	334	41	32	*23*	430
- Metropolitan Cork	154	170	75	*56*	455
- Ring Towns & Rural Areas	118	150	61	*53*	382
Rail Infrastructure	133	-	-	-	133
Green Routes Network & Traffic Management Initiatives	64	56	48	-	168
Major Road Schemes	84	244	47	-	375
Local Integrated Transport Plans	34	18	20	-	72
Totals	**921**	**679**	**283**	***132***	**2015**

**Excludes transport costs for T4*

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4: Implementing the Strategic Plan

4.1 Introduction

Throughout the study and the consultation process, implementation has been a key theme. There is no doubt that implementation is regarded by many as by far the greatest challenge facing the Strategic Plan. This chapter examines the implementation issues raised by the study and suggests potential structures and procedures that can be put in place to ensure the strategy is implemented in an orderly and timely manner. The relative ease with which the strategy can be implemented will depend on the level of finance available through national government and European funding processes, and the extent to which private sector contributions can be committed. In both cases the Plan and accompanying planning process form part of an advocacy process with which to pursue funds. An understanding of the funding options is therefore important. These options are discussed in this chapter.

This chapter also discusses how marketing and promotion will play a vital role in the future development of Cork and why this is important in a competitive global market.

The Strategic Plan will not provide a fixed blueprint for the future of Cork, and the implementation process must facilitate a flexible approach in order to respond to changes in the socio-economic situation, land use scenarios or development pressures. To facilitate this flexible approach, a monitoring framework has been devised, to enable the authorities, investors and funding agencies to monitor, review and update the strategy.

4.2 Marketing

The first step in promoting Cork as a progressive region, eager for change and innovation, is to begin a process of annual audits and benchmarking. Cork will know if it is making real progress when it knows how its starting position and performance measure against the competition. In today's market there is only one standard at which to perform and to which Cork should aspire, namely the international standard.

All place marketing programmes are based on the fundamental assumption that a location enjoys some form of comparative advantage over its competition. Most places find it difficult to make an objective assessment of their relative strengths and weaknesses or to evaluate opportunities and threats. The Cork City-Region has outstanding assets *inter alia* its people, its environment, its location, its University College and Institute of Technology, research institutions such as NMRC' its world-class companies, its port and harbour area. A mechanism needs to be introduced which enables the Cork City-Region to constantly evaluate these assets in the international as well as the national context and also to encourage the process of continuous development of Cork's product offer, using international best practice as a benchmark and inspiration. This will then allow the effective rolling out of strong and highly focused local place marketing initiatives.

An annual benchmarking programme should be introduced which measures Cork's performance and on-going development against Europe's leading sub-regions with a similar or comparable profile to Cork, targeting those demonstrating the strongest growth performance/most imaginative responses to the changing environment. Where appropriate, Cork should seek to establish practical partnership programmes with outstanding European sub-regions along the lines of the Four Motors Initiative which involves four of Europe's most successful regions Baden Württemberg, Catalonia, Rhone Alpes and Lombardy.

Confirm Cork's Brand Values

A place's identity and marketing potential is as much a factor of the values it represents and transmits as the physical assets it possesses. Some places have successfully used slogans to convey a message, e.g. Glasgow (Glasgow smiles better) Bangalore (Software City); most fail because they are too predictable or untrue; Europe is full of 'gateways' and 'springboards'. Cork itself uses the slogan 'Ireland's Second City', which is factually untrue but hardly sets the pulse racing in any case.

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Brand values are more powerful and enduring than slogans. The Cork City-Region has powerful values which are rooted in its communities, including:

- Tradition.
- Innovation.
- Inclusion.
- Creativity.
- Educational excellence.

Cork should build a brand from these values and create a profile for itself, which will enhance the internal sense of place, act as a spur to onward development and to enhance its external 'reach' and marketing potential.

Clusters, Specialisation and Growth

A key feature of Europe's most successful regions is that they all possess clusters of specialisation, where the geographical concentration of firms, their suppliers, research institutes, service providers and supporting infrastructure create a dynamic environment based on collaboration (and competition), co-location and knowledge exchange. Clusters have the power to attract new investment; over 60 per cent of inward investment establishes amongst competitive or complimentary clusters. Clusters also create supply opportunities within the cluster value chain for local companies. Clusters have become a key platform for place marketing programmes throughout Europe; many regions that claim to have clusters do not; those that do have them do little to develop them.

The harsh reality is that if clusters do not develop they can quickly go into decline, increasing the vulnerability of the regional economy. As a result of the inward investment process, Cork has significant clusters or concentrations of companies with the potential to develop into clusters. Established clusters/ concentrations include pharmachem / healthcare, software, electronics and print/packaging. Emerging clusters / mini concentrations include financial and business services, creative industries and e-business.

Clusters, by their nature, are dynamic. On-going analysis, which is specific to the Cork City-Region, needs to be carried out to identify -

- The missing or weak links in the existing clusters (e.g. absence of research and product development) which will inhibit growth potential of the cluster.
- Opportunities for deepening or expanding the structure of the clusters.
- Opportunities for Cork's place marketing programme through the clusters' international networks.
- Evidence of the start of any downward spiral.

Emerging cluster analysis in Cork will help inform the place-specific needs of these companies. Just as important, it will allow public and private partnerships to form and assist nascent cluster groups, potentially giving Cork an early competitive advantage. Such analysis should be carried out in co-operation with IDA and Enterprise Ireland.

Geographical concentration is an important feature of successful clusters. At the same time clusters ignore administrative boundaries. Opportunities for collaboration with neighbouring city-regions should be pursued lending greater critical mass and quality to cluster development. Again there are numerous good examples of such co-operation. One is The Medicon Valley Initiative between Alsace, Basel and Dreilandereck, Telecomms Valley (South of France), Bio Valley (Skåne in Sweden and Greater Copenhagen).

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Innovation

Innovation is going to be the key driver for Cork over the next 20 years. Although geography is currently irrelevant in many sectors, the danger of peripherality still exists - not from Cork's geographical position but from an inability to respond to change. This danger is supported by research that suggests that no part of Ireland is in the first ranks of change-oriented regions.

Innovation has now become a *leitmotif* in regional development, running throughout programmes designed to improve international competitiveness. Innovation is partly about adopting new technology; it is largely about creating a new way of thinking and developing the sub-region's assets. As such, it is an important element in Cork's place marketing programme.

Over 100 European regions have formalised their approach to innovation by developing space-specific regional innovation and technology plans. Examples include North Brabant (Netherlands), Tagus Valley (Portugal) Lorraine (France) Aarhus (Denmark). It is a strong recommendation that Cork develops an Innovation Initiative.

Cork's strengths in innovation lie with University College Cork, the Cork Institute of Technology, The National Institute for Management Technology and The National Microelectronics Research Centre. Innovation is already an important feature of Cork's profile, but there needs to be a framework put in place to foster the process without killing it through institutionalisation.

Innovation needs a platform, a physical expression, a focus. University campi provide that up to a point, so too do science and research parks, up to a point. The Cork Business and Technology Park is an important contributor to the regional economy and innovative profile of Cork, but over the life-time of the Strategy Plan a broader platform should be created. There is an opportunity to create a new model within the Cork sub-region, by developing a location or locations which provide a different environment. The focus should be on innovation and creativity, reflecting the convergence of many sectors in the new economy, arts and sciences, research and development in all its forms and culture and the arts.

The spirit of such a concept and the potential of its impact is best seen in the Sophia Antipolis 'Technopole' in the South of France. Sophia Antipolis, situated 20 kilometres from Nice, was launched more than 30 years ago and remains the most dramatic expression of how industry, commerce, education, research, culture and quality of life can be combined to create a unique environment. Today over 1,100 companies and institutes, employing 25,000 scientists, researchers, designers, developers are based at Sophia Antipolis.

Cork would not and could not replicate Sophia Antipolis, but it could take the spirit of Sophia Antipolis and translate it into the local context. The Cork Harbour Area would offer a superb environment for a Cork Technopole; the area around Bishopstown or Ballincollig, with its existing concentration of high technology companies, has the potential to develop into a Technopole; the redevelopment of the Cork Docklands presents another outstanding option.

Flagship Projects

Cork needs to move the threshold of its ambition and commit to attracting/developing projects, (investments, attractions, amenities) which are of truly international stature and act as a catalyst for further development.

An important element in Cork's international place marketing strategy will be the on-going development of projects that enhance the city-region's added-value offer and that, at the same time, are of national/international significance, highly visible, a source of pride to local communities and generating enormous pulling power.

Cork Harbour is an outstanding asset which has the potential to become Europe's most exciting waterfront, the focus for a 'mosaic' of different opportunities. Baltimore, USA has demonstrated the enormous potential of waterfront development; so too projects in Gothenburg, Trieste and Cardiff Bay.

4: Implementing the Strategic Plan

The proposed Cork Docklands redevelopment project including the Kent Station redevelopment project represents a flagship project. So does the Monard development and the Green Routes Network. Not all flagship projects need to be 'mega'; it is their critical quality which is important. The award-winning Urban Pilot project in Cork City 1994-98 is an excellent example. Nor do such projects need to be in an urban environment. Part of the objective of the place marketing programme has to be to achieve a more even spread across the city-region but in a way which is sympathetic to the local environment, consistent with the themes of innovation and creativity, and of an international standard.

Improving Communication

Fragmented regions find it difficult to make progress. Successful regional place marketing programmes build on and reinforce co-operation between companies, public sector bodies, education and professional service providers: the regional stakeholders. Successful strategies facilitate the internal flow of information and promote greater integration. To this end, greater partnership and networking is essential. Successful strategies do not seek to cordon off the region, but to build national and international networks to transmit information to and from the international market. It will be important to address the need identified in Chapter 8 for provision of local loop access to the backbone broadband provision. This will markedly improve Cork's connectivity and enhance its competitive position.

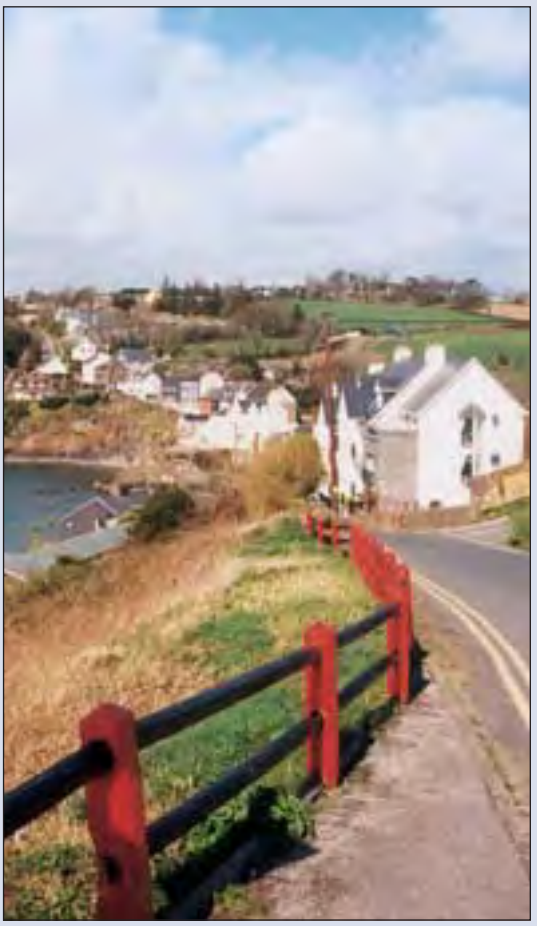
Making it Happen

Progress towards creating one of Europe's most progressive regions is not going to be made in a single quantum leap, but rather through an on-going series of decisive small steps.

The weakness of many place marketing programmes is that they run out of steam, they become institutionalised and lose their momentum. None of them fail entirely; they just drift. To avoid this, there is a need for a dedicated post - Europe's first Future Manager with responsibility to -

- Drive forward and monitor progress.
- See the 'big picture' at the same time as ensuring strategic focus.
- Co-ordinate resources, working with and supporting the local, regional and national agencies.

This is not a call for a sub-regional development agency; Cork benefits significantly from the existing institutions; there is no need nor desire to replicate their work, thereby creating an extra tier of bureaucracy.



4.3 Institutional Processes

Emphases

Key Strategic Issues to be Addressed by Implementation Structures

A number of issues raised by the proposed strategy must be addressed at the implementation phase by appropriate structures and procedures, if the strategy is to be successfully implemented. These include the following:

- **Integration of transport, housing, retail and office policies across County boundaries -** In the area of *housing*, the City has large land needs for affordable and social housing. Potential sites lie in the County. Partnership of the local authorities is required. The joint housing strategy will be critical in this regard (see below). It must be possible to revise and manage the release of land (as result of policy and monitoring) if rural suburbanisation is to be stopped and proper settlements created. Release of land and the issue of permissions should be co-ordinated across boundaries, in order to ensure the emergence of a sensible hierarchy. The retail strategy is also important in this respect.

4: Implementing the Strategic Plan

- **Drawing up Local Area Plans -** In order to implement this present strategy, it will be necessary to (a) prepare comprehensive local plans which define new roads, landscape, infrastructure, sites for schools, shops, clinics, employment areas etc, as well as housing by type; (b) manage phasing and co-ordinate all the numerous inter-related actions; and (c) ensure that serviced land is *delivered in the right place at the right time* in an assured and predictable way. Phasing of land release is vital to avoid premature take-up. The need for local plans applies to both greenfield sites and brownfield locations such as the City Docks and urban area regeneration areas.

- **Ensuring land delivery -** It is often difficult to bring development land on to the market at planned locations at the right time, with the result that far more land is zoned than is needed. This introduces an element of unpredictability and may make proper planning of infrastructure requirements and implementation difficult. The authorities will play a key role in ensuring the orderly development of the study area through the exercise of their powers and functions where necessary, including planning approvals, the designation of Strategic Development Zones and compulsory purchase.

- **Levering public and private finance -** Advance infrastructure, as well as superstructure, land delivery, etc must be financed in a timely and co-ordinated way. In this regard, it should be noted that the ratio between resource base and investment requirements is markedly less in the City than in the County.

- **Marketing, Inward Investment and Location** Promotion of the area is currently weak and requires strengthening. This has been discussed in more detail in Section 4.2. Strategic industrial location (which drives any plan) must be integrated with other policies and programmes.

- **Integration of transport initiatives -** Projects and policies for all transport modes, public and private, must be integrated with each other and with land use decisions and local layouts irrespective of administrative boundaries.

- **Plan Revision -** The planning, monitoring and revision process will require a consistent approach regardless of boundaries or other divisions of responsibility. It is proposed that both local authorities, in conjunction with central government, through the proposed CASP implementation and review body, would formally review the CASP strategy at various stages as determined during the currency of the strategy.

A proposed mid term review will comprise a complete review of the implementation of CASP including an assessment of the development and demographic changes that will have taken place in Cork City, Metropolitan Cork and in the Ring Towns compared to the objectives and targets of CASP. This review will also examine the progress and impacts of the public transport components of the CASP and make specific recommendations as to how any imbalances, arising in the provision of services on the south side or the north side of the City, can be corrected, including a review of the potential for light rail, particularly on the south and west of the City.

The above points must be covered adequately by any proposed implementation programme. If they are not all addressed then this Strategic Plan will struggle to succeed.

Experience Gained from Previous Implementation Structures

The 1978 LUTS Plan ended with a section on proposals for management and co-ordination structures to direct implementation of the Plan. It noted that the Plan represented the Study Team's recommendations, "developed with the guidance and support of the Joint Committee of Elected Members and the Technical Committee of senior officials". Co-ordination and monitoring of implementation of the Plan by these committees was to be assisted by a multi-disciplinary working group, and possibly by special purpose sub groups.

4: Implementing the Strategic Plan

The 1992 LUTS Review proposed a revised division of function, in which the Joint Committee and the Technical Committee would be responsible for maintaining an overall view of the LUTS strategy, and the multi-disciplinary working group would be replaced by smaller groups carrying out more specific tasks, under the direction of these committees.

The specific tasks were:

- Monitoring and information.
- Advice and research.
- Project development and implementation.

The review also recommended establishing or extending appropriate liaison arrangements between relevant Government departments, the Technical Committee and the implementation group.

Whilst this improved structure attained some success, a number of problems remained:

- Although there was more emphasis on action-orientation, it appears to have failed to overcome the problems of individual agencies making decisions independently of the needs of the Plan - or failing to invest at all.
- Although the Plan was adopted by both Local Authorities, planning decisions in both functional areas at times over-rode or failed to relate adequately to the Plan, with resultant conflict between the City and the County.
- The implementation groups seemed to run out of steam after a while and the technical group met at less and less frequent intervals with the passage of time, indicating perhaps that staff priorities were switched elsewhere.

Emphases in Implementation Structures Suggested by Key Issues and Previous Experience
In the light of the above, priorities in the implementation of the current Plan must relate more than before to:

- Ensuring that all authorities and agencies commit to the Plan.
- Providing the staff, technical and financial resources for rapid implementation of specific flagship projects in order to demonstrate the vitality of the Plan and the Plan process.
- Co-ordinating across a range of capital projects as well as in management.

Furthermore, it must be emphasised that the implementation process needs to work through institutional and financial structures that are on the ground now, if the Plan is to make sufficiently fast progress.

Designing Implementation Structures: Principles and Objectives
There are now a larger number of possible implementation models than ever before and there is also more finance available for development. It is important, therefore, to establish clearly some overall principles which will assist in choosing the right models. The tasks to be achieved must also be established, for the same purpose.

General Principles to be Followed
The following general principles should be followed in all areas of implementation:

- Utilise all possible aspects of existing legislative powers but avoid a requirement for new legislation.
- Regard the process of establishing ownership of, and commitment to, the Plan, by all parties, as a fundamental and on-going element of the implementation process.
- In general, choose the most efficient methods of operation.
- Choose structures and approaches which will maximise the possibility of draw-down of funds from the State and the private sector.
- Choose structures and approaches which will maximise the speed of implementation.
- Reduce uncertainty in the development process as far as possible.
- Minimise the removal of powers from existing bodies and structures which might compromise democratic accountability.

Tasks to be Achieved
Four broad divisions of Plan implementation may be identified, for the purposes of institutional structures:

- The on-going task of obtaining policy commitment to the Plan by all agencies.
- Implementation of major capital works.
- On-going management and co-ordination measures in relation to the provisions of the Plan.
- In addition, there is the general task of monitoring, appraisal and review.

The On-going Task of Obtaining Policy Commitment to the Plan by All Agencies
Objectives
Implementation must achieve the following five main objectives in this area:

- Gain agreement by all parties to the strategy.
- Ensure that the strategy is incorporated in strategy documents and implementation programmes of all parties.
- Keep actions of agencies in line with the strategy.

- Ensure that development control decisions in both authorities reflect the strategy.
- Provide channels of discussion, to evaluate issues and to review policy on an on-going basis.

Strategy

The key to success in this area is to ensure that relevant strategy documents include the objectives of the Plan. These documents include the County and City Development Plans, which are both due for review, the joint retailing and housing strategies for the City and County, the Strategy of the City and County Development Boards and the Regional Planning Guidelines.

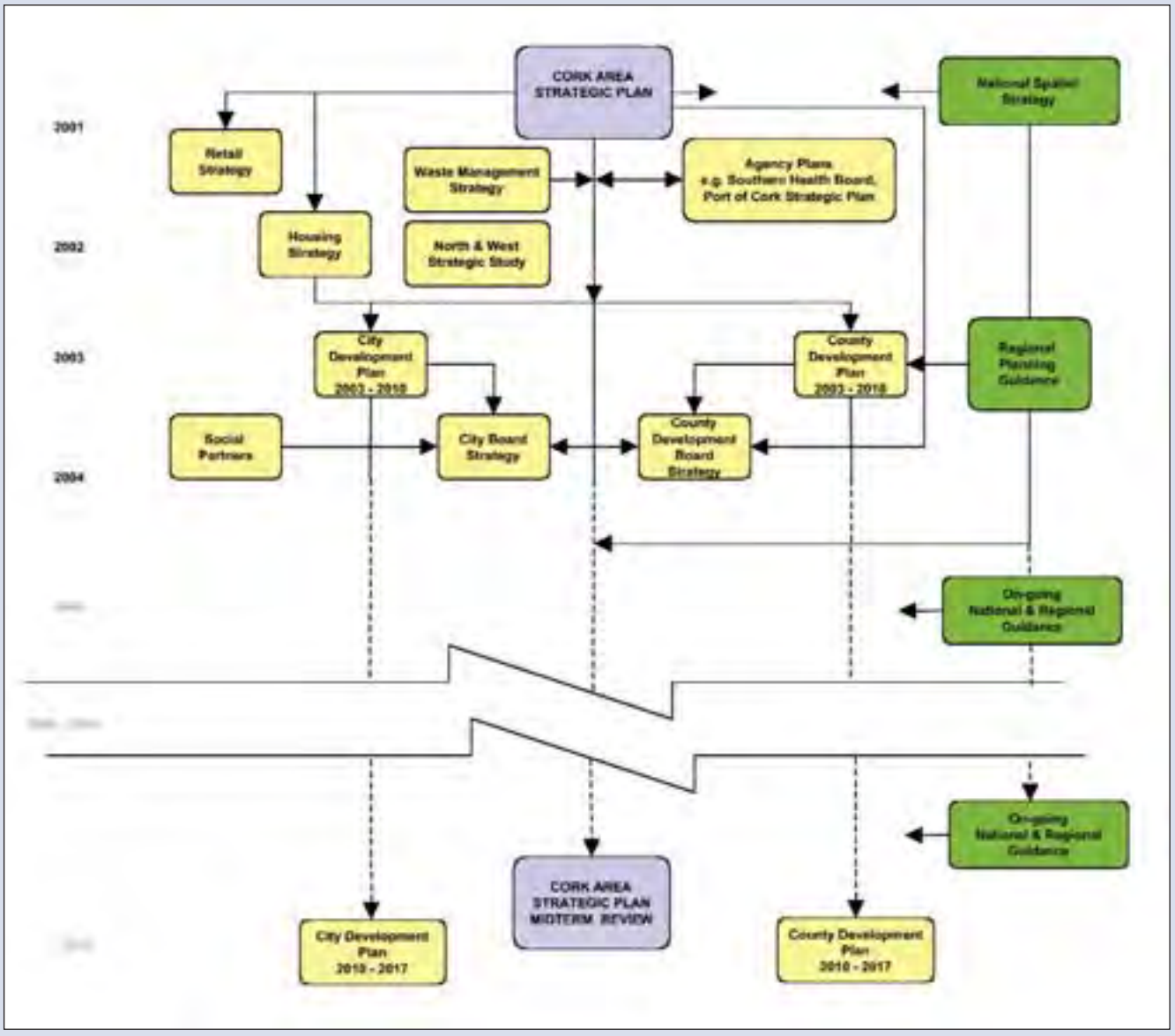
The linkages of these are shown in Figure 4.1, and their relevance explained in the Panel below. The timing of these plans is of critical importance to the success in obtaining policy commitment.

The Joint Housing Strategy must be in place by the third quarter of 2001, and this is the single most important document which must be in support of the CASP. The timescale for the Joint Retail Study is longer, but given the work that has already been done in this area by the two authorities, and the pressure for development, this too is urgent. It will also be of great significance for the success of the Plan.

These two strategies will, in turn, inform the City and County Development Plans - and should also influence the investment plans of CIE and the IDA, amongst others. By mid 2002, therefore, all authorities and agencies should be pointing in the same direction.

The common direction of the Housing and Retail Strategies will then be underpinned by the City and County Development Board Strategies, which will have to take on board the existing agreed land use and transportation plans, with concomitant housing

Figure 4.1 **Linkages between Cork Area Strategic Plan and other Initiatives**



4: Implementing the Strategic Plan

provision. The Board plans will both widen the picture through incorporation of social and cultural imperatives as well as underpinning the economic vision for the Cork area. At this point, the Local Authorities Bill 2000 should be incorporated in Statute law and Section 128 of the Bill should ensure that all authorities and agencies commit themselves to the vision and strategy. This will be further reinforced by the Regional Planning Guidelines which will be prepared after the completion of the National Spatial Plan, and to which the Planning Authority is obliged to have regard.

By 2003, therefore, there should be a triple lock on the main Plan provisions, through the statutory development plans (including housing and retail plans), the Board strategies and the regional planning guidelines.

It will be a fundamental element of the implementation strategy to ensure that this process is kept on track by timely monitoring and review of the various strategies and plans as they are developed.

Implementation of Major Capital Works

Objectives

The major areas of capital expenditure which can be readily identified are the public transport initiatives, the major road schemes (North West Link Road), and the redevelopment of the Docks. There are other major developments that need additional infrastructure, particularly the larger proposed settlements at Midleton, Monard and Mallow. Of these, Monard is potentially the most challenging to implement because, although it is in the County, it is significant to both City and County, and also because it has least existing infrastructure or settlement.

There is an overlap between these initiatives, particularly between the public transport programme and the rail-based development at Monard, Midleton and Carrigtwohill, as well as renewal within the centre of Cork City.

Delivery of each of these is critical to the success of the Plan and the economic and demographic realities are such that work on them must be front-loaded, i.e. commence immediately. Population growth will be fastest in the early years, as will housing demand. This means that this provision must be made quickly, because in its absence, development will happen elsewhere, undermining the main thrust of the Plan. Economic development will also slow down with the passage of time, which means that the potential for 'steering the moving ship' may be reduced.

For all of these reasons, the objectives here are all focussed, as was indicated earlier, on the imperative of making it happen:

- To establish and agree a clear brief for each major works undertaken, including very clear phasing of development.
- To provide staff to make it happen.
- To co-ordinate effectively the work of all agencies.
- To maximise the speed of implementation.
- To maximise leverage of private sector funding.
- To ensure that developments which span or impact more than one authority are effectively dealt with in administrative and legal terms.

Strategic Planning Initiatives relevant to the Cork Area Strategic Plan

Housing Strategy

Part V of the *Planning and Development Act of 2000* requires that housing strategies be drawn up by planning authorities and integrated into their development plans. In addition, the Act makes communities' needs for social and affordable housing a material planning consideration. The Act places a statutory obligation on planning authorities to ensure that sufficient land is zoned for housing in their development plans to meet the projected housing requirements over the Plan period.

Section 80 of the Act requires that each planning authority prepare a housing strategy which will form an integral part of the development plan and act as the cornerstone for future housing policy within the functional area of the Authority. Planning authorities should 'have regard to the strategies of adjoining planning authorities and should co-ordinate the objectives of the housing strategy with those of the other authorities'. In appropriate circumstances, a number of planning authorities can come together to draw up a housing strategy in respect of the combined areas of their development plans. For Urban District Councils, Boroughs and County Boroughs, it will normally be necessary for the housing strategy to be prepared on a joint basis with the relevant County Council. **It is open to the Minister to direct that this is done.**

Retail Strategy

In the five remaining urban areas, including Metropolitan Cork, the guidelines require a joint City / County retail study for the combined urban areas. The Retail Planning Guidelines call for the preparation of retail strategies and policies by each Planning Authority. The guidelines state that it will be necessary for counties to co-operate with one another in preparing retail strategies. In order to plan for future development, the relevant counties should assess the broad requirement for additional development over the Plan period. This assessment should take account of both emerging demands in the retail market and an estimate of future requirements based on projected changes in the local population and consumer spending. These assessments of future retail requirements are intended to provide broad guidance as to the additional quantum of convenience and comparison floorspace provision. The strategy to be incorporated into development plans should provide guidance as to the general location and scale of development. Such strategies should also include traffic management policies to be adopted for town centres in development. It is clear that the retail policy for Cork can only be effectively developed if both Authorities have signed up to and are committed to the Strategic Plan, which will provide the framework for sub-regional distribution of population and transportation.

Regional Planning Guidelines

Thex Planning Act 2000 has considerably strengthened the role of Regional Planning Guidelines. The objective of these guidelines is to provide a long term strategic planning framework for the development of the region for which the guidelines are prepared. Regional Authorities have been asked to defer the making of such guidelines until after the completion of the *National Spatial Strategy*. A Planning Authority 'shall have regard to any regional planning guidelines in force for its area when making and adopting a development plan'. The Minister may, by order, determine that planning authorities shall comply with any regional planning guidelines in force. Such guidelines cover matters which include projected population trends and settlement and housing strategies; economic and social trends; the location of industrial and commercial development; transportation, including public transportation; water supply and waste water facilities; waste disposal; energy and communications networks; the provision of educational, health care, retail and other community facilities; preservation and protection of the environment.

City and County Development Boards (CDB)

The primary function of the Development Board is to draw up and work towards the implementation of the strategy for economic, social and cultural development within the City/County. It is intended to build on, extend and continue the work of the City/County Strategy Group, in particular liaising with each other as to plans/initiatives for the City and County, fostering joint approaches, where practical, and progressively moving towards more co-ordinated planning. The relevant guidelines say that the CDB strategy must take account of the statutory development plan and its goals, but should in fact provide the socio-economic context for the statutory local authority development plan. The CDB should also take account of agreed regional development strategies and programmes, as well as the Strategic Planning guidelines and the emerging *National Spatial Strategy*. Once the Local Authorities Bill 2000 is incorporated into law, Section 128 will oblige all agencies to take cognisance of these plans.

1 Section 21(4) of the Act gives the strategic planning guidelines for the Greater Dublin area the standing of regional guidelines

4: Implementing the Strategic Plan

Strategy

A number of possible models of implementation have been examined, including:

- The Dublin Docklands Authority Model.
- Strategic Development Zone model.
- Dedicated project office under the relevant Local Authority.

Because it would require enabling legislation, and because it carries few advantages not available under the SDZ approach, the Dublin Docklands Authority model is not favoured. In general, projects which pertain mainly to one or other of the Local Authorities, should be implemented by that Authority. However, for the purpose of implementing the very significant capital expenditures required, in particular for the development of the Dockland area and Monard, development agencies could be created and prescribed by the Minister under Section 165 of the Planning and Development Act, relating to Strategic Development Zones. It should be noted that under Section 169 of the Act, the existing Planning Authority does not cede any powers of plan approval to another agency as a result of the recognition of this development agency. In the case of Monard, negotiations could be entered into between Cork City Council and Cork County Council, having regard to Section 168 (5) of the Act, to decide who will administer the functions conferred under the Planning Authority under the Act.

Whilst conferring considerable advantages in terms of speed, co-ordination and planning certainty, a decision on whether to choose this route is considered premature until the broader implementation structures for the Plan are in place and a more detailed planning study of each geographical area involved, including a business plan and financial analysis, has been undertaken.

Elsewhere, in order to facilitate development of Ring Towns, including the Eastern Corridor, a special unit should be created within the County Council, with staff from all relevant Departments, including housing, planning and architecture, as well as relevant business and financial skills necessary to implement business plans and promote and execute Public Private Partnership (PPP) initiatives as a means of levering private sector funding. This structure may also be appropriate for dockland redevelopment within the City.

The funding context for the Plan is discussed later in this chapter in paragraph 4.4 and it sets out some public and private sector funding options. As part of the Action Area Plans and more detailed feasibility studies, the most beneficial forms of public-private partnership will need to be identified. Projects will need to be packaged so as to optimise financial opportunities. Detailed financing studies should be commissioned jointly by stakeholders ahead of the designation of any developmental agencies which may be decided upon.

On-going Management and Co-ordination Measures

As regards the more general aspects of transportation investment, although significant investment is required in the area of transportation, the required interventions are less concentrated than other major capital programmes and the major emphasis must be on a co-ordination of agency effort rather than definition of special areas or new implementation agencies.

In this regard, the Dublin Transportation Office (DTO) provides one model. This arrangement has the following features:

- No power is ceded from existing local authorities.
- It provides a visible public profile and focus for transport issues.
- It allocates the necessary staff for execution and monitoring of the Plan, becoming, in effect, a secretariat examining and reviewing the progress of the Plan.

The policy challenges faced by the DTO and the measures taken to overcome them provide a good starting point and an example from which to learn.

The co-ordination requirement for Cork actually goes beyond the co-ordination of transportation to embrace land-use and the title Cork Area Strategic Plan Office (CASPO) could be more appropriate. The functions of this office should embrace the following:

- To act as a meeting place for relevant authorities, and sometimes as an honest broker between them.
- To become a prescribed body under the Planning Acts.

- To take responsibility for the regular updating of the Transportation and land-use aspects of the Strategic Plan (on-going monitoring of progress in implementing the Plan and taking account of changes in economic or other circumstances will be needed to ensure that any obstacles to implementation are identified and responded to as soon as possible).
- To act as the 'shop window' for strategic planning in the Cork area.
- To administer a small budget which could be used for key interventions in the area of transportation.

The work of CASP would, however, extend beyond this remit to the implementation of certain key infrastructural projects, as set out below.
The structure of the organisation should learn from the experience of the DTO. It should recognise the strategic importance of the roles of CIE, IDA and the CDBs as well as any deregulated elements of the public transport sector, in due course.
In addition to CASP, the City and County Development Board will have a co-ordination role which is recognised by Section 128 of the Local Government Bill (see page 75).

Summary: Proposed Implementation Structure
The overall implementation structure recommended, is shown in Figure 4.2 and is designed to achieve the objectives set out above in the areas of: authority/agency commitment to the Plan; providing staff, technical and financial resources for rapid implementation; and on-going management, co-ordination and review.

The *Monitoring Committee*, which replaces the Joint Committee established after the 1992 LUTS Review, will comprise members of the Corporate Policy Groups from the City and South Cork and will accept the primary responsibility for ensuring that all authorities and agencies commit to the Plan in terms of their own policy and the allocation of the requisite resources.

The Steering Committee, which will comprise the City and County Managers as well as the CEO's of the relevant agencies, and 4 elected representatives of Cork City and County Councils, will also maintain an overview of the direction of Plan implementation, but in addition will have overall responsibility for the operation of the *Cork Area Strategic Plan Office (CASPO)*. Consideration should be given also to the establishment of an Advisory Panel to assist the Steering Committee in its work.

4: Implementing the Strategic Plan

These two structures broadly reflect the structures at this level after the 1992 LUTS review. Beyond this, however, it is considered of prime importance to the effective implementation of the Plan that a *Cork Area Strategic Plan* Office be established, along the lines set out above. In summary, its main roles would be:

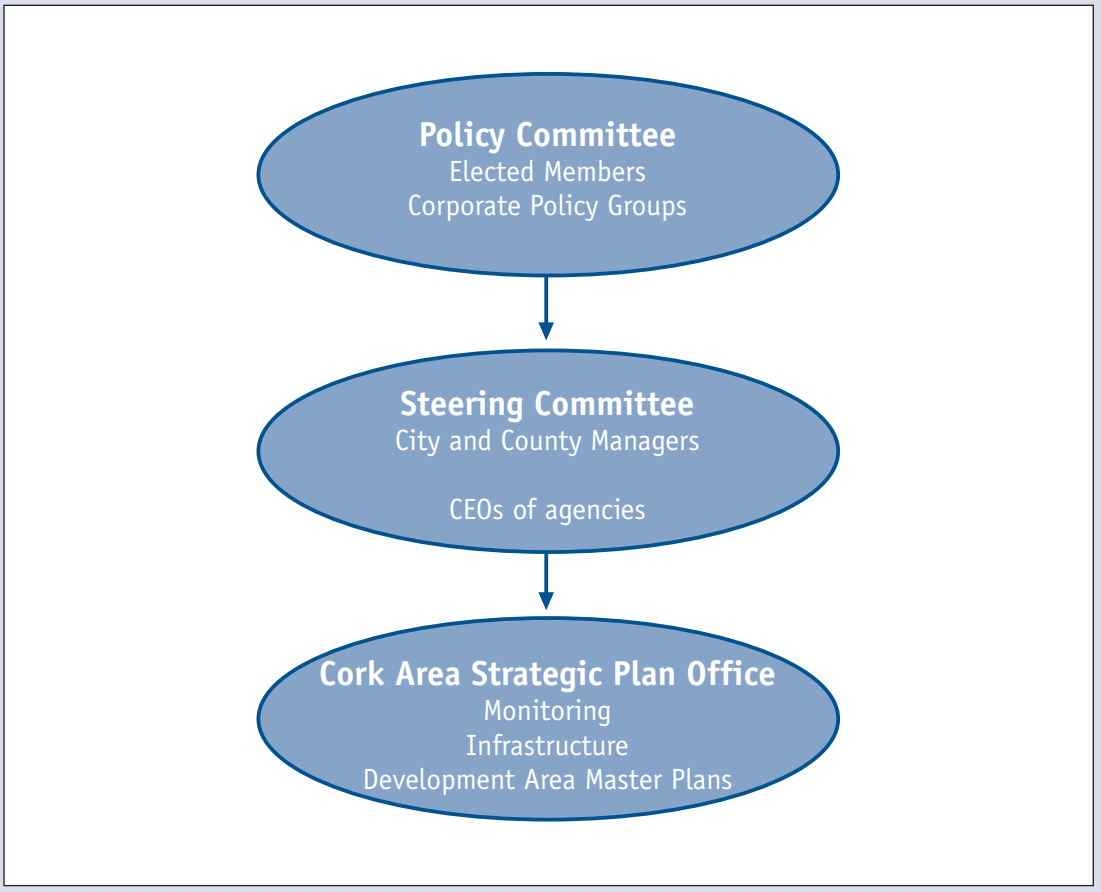
- Monitoring implementation of the Plan.
- Facilitating the planning of major infrastructural projects, including transportation.
- Organising the establishment of the Monard 'Master Plan', including implementation of necessary arrangements for the establishment of an SDZ in Monard (and/or elsewhere, if, after study, this option is decided upon).
- Organising the appropriate financial instruments for the successful implementation of the Plan, including Public Private Partnerships, serviced land initiatives etc.

The office would be staffed full-time by officers from the two local authorities, and staff from other agencies as and when required.

The issue of a Borough Boundary Extension has been raised by elected members of Cork City Council. An extension of the City is, however, not seen as an available option in the administration of the strategy set out in this study. Consideration of the boundary issue is independent of the Cork Area Strategic Plan. Cork City Council has indicated that the matter will be subject to a separate report. It is mentioned in this chapter on implementation for the purposes of clarification only.

The establishment of these structures does not preclude their subsequent amendment when circumstances warrant it.

Figure 4.2 **Overall Implementation Structure**



4.4 Funding

The Public Sector Funding Regime

The Department of Finance has overall responsibility for the financial planning of the Irish State. This remit covers current and capital receipts and payments. Overall planning is carried out within the framework of periodic *National Development Plans* (NDP), which cover 7-year planning horizons. The current NDP covers the period 2000–2006.

Within the NDP period, the finances are managed through the annual Book of Estimates, which are provided for by the Oireachtas by way of separate votes. The annual planned capital investment programme of each Government Department is set out in the Public Capital Programme, which is included in the Book of Estimates.

The Department of Finance is responsible for identifying the financial consequences of all proposals put before the Government. The Department of Finance sanction for projects may be specific (in relation to one-off proposals), or delegated (general sanction to deal with clearly defined cases without further recourse to the Department of Finance). For public / private partnership (PPP) projects, Department of Finance sanction should be delegated to the sponsoring Department or the NRA.

The National Development Plan (2000–2006), published in 1999, envisaged €51.4 billion of public investment. More than €14 billion of this investment will be in the roads, water and transport sectors.

T*he National Development Plan* is given effect through separate Operational Programmes that are approved by the European Commission. The Economic and Social Infrastructure Operational Programme (ESIOP), which contains the bulk of infrastructural investment under the NDP covers national roads, public transport, water services, housing and health, as well as coastal erosion and sustainable energy measures. While most of the funding for the programme comes from Government sources, over €1.4 billion will be provided by the EU in the form of ERDF and Cohesion Funding. The Operational Programme also targets private funding of €2.2 billion under Public Private Partnership arrangements, mainly in national roads and water services. Other infrastructural investment under the NDP, including non-national roads, rural water supplies, solid waste management and urban and village renewal, have been provided for in the S&E and BMW Regional Operational Programmes.

Table 4.1 **National Development Plan Funding Allocations**

All amounts in €million, 1999 prices. Programme	Roads	Water	Transport	Other	Total
Economic and Social Infrastructure	5,969	3,168	2,837	10,388	22,362
Employment and Human Resources				12,562	12,562
Productive Investment				5,725	5,725
S&E Regional Programme	1,140	160		2,491	3,791
BMW Regional Programme	891	372		1,635	2,898
CAP Regional Programme				4,324	4,324
Peace				127	127
Total Funding Allocation	**8,000**	**3,700**	**2,837**	**37,252**	**51,789**
PPP funding	**1,270**	**127**	**381**	**571**	**2,349**
EU funding	**782**	**537**	**245**	**4,383**	**5,947**
State / Other Funding	**5,948**	**3,037**	**2,211**	**31,820**	**43,016**

4: Implementing the Strategic Plan

Key Sources of Public Sector Funding
Public Sector funding is channelled through to individual projects through a variety of programmes. In general terms, this form of finance may be:

- Allocated directly from central government.
- Awarded by local councils from their allocated annual budget. or
- Awarded from European Union funds under the numerous funding initiatives.

Different government departments have overall responsibility for projects in the particular project areas, for example:

Sanitary Services
The Department of the Environment and Local Government has responsibility for delivery of environmental services, including Water Supply, Waste Water Treatment and Management and Rehabilitation of the Networks. A summary of the investment programmes under the ESIOP for these services is set out below.

Under the *Waste Water Treatment Measure* a total investment of €1.66 billion is planned in new collection, treatment and disposal systems with 245 schemes to be completed by 2006. This also caters for the up-grading of existing infrastructure.

Under the *Water Supply Measure*, a total investment of €579 million is planned for additional water treatment and distribution capacity, with 90 schemes scheduled for completion by 2006. This also caters for the replacement of lead mains.

Under the *Management and Rehabilitation of Infrastructure Measure*, a total investment of €862 million is planned for water conservation and leakage reduction, and rehabilitation of the water and waste water network rehabilitation. Sixty schemes are due to be completed by 2006, and funding is also provided for improved management systems, and training for local authority staff in order to maximise the effectiveness of improved infrastructure.

Transport
The Department of Public Enterprise has responsibility for delivery of public transportation services. Total investment of €3.05 billion is planned under the ESIOP, in two measures, of which the *Dublin Transport Measure* requires a total investment of €2.1 billion. This budget has since been elaborated in order to underpin the DTO's "Platform for Change" Strategy published in late 2000.

Under the *National Public Transport Measure*, a total investment of €978 million is planned with the targeted uses being the up-grading of mainline rail, 490 km of line replaced, upgrade of station facilities, purchase of additional rolling stock, up-grading public transport in Cork, Limerick and Waterford, 110 new City buses, upgrading rail services in Cork and Park and Ride facilities. There is also provision for up-grading bus services in rural areas and improvement of access to services for disabled people.

The *National Roads Authority* (NRA) has responsibility for planning and supervision of construction and maintenance of the national roads network, while local authorities are responsible for regional and other roads. Total investment of €6.75 billion is planned under the ESIOP, including the development of five major inter urban routes by 2006, major improvement works on other national primary routes, completion of the M50 and the Dublin Port Tunnel and improvement of national secondary routes.

Cork Docks Redevelopment
The Department of the Marine and Natural Resources has primary responsibility for investment in the Port of Cork. However, the developments being proposed would not fall under the remit of this Department, and the various options for progressing the Docks project are discussed in the late sections of this chapter.

Scope for Private Sector Involvement
In recent years, there has been an increased level of private sector interest in investment in infrastructure. In Ireland, Government policy has decided that in suitable circumstances, private finance should be used in the financing of infrastructure projects in order to accelerate the capital programme and contain project risk efficiently. At the same time, the funds available from the EU have diminished necessitating the utilisation of alternative sources of finance.

Sanitary Services
In general, the considerations that will shape the selection of a preferred form of Public Private Partnership for projects in the water services sector include the size and scope of the project (including its operational content), the ability to apply user charging and the extent of risk transfer required.

Water supply and waste water headworks are likely to be very suited to Design Build and Operate (DBO) and Design Build Operate and Finance (DBOF) contracts. They may also be suited to concession contracts where there is an opportunity to introduce user charging. However, water supply and waste water facilities are considered to be less suited to Design and Build (DB) contracts as the public sector would retain the risks associated with operating increasingly complex treatment processes, without having had a role in the design of those processes.

On the other hand, the construction of water supply or waste water networks in Ireland is unlikely to be suited to the Public Private Partnership approach due to the poor level of information on the extent, composition and performance of existing networks. The construction, upgrading or on-going maintenance of networks are likely to give rise to a significant amount of risk due to the lack of basic data and as a result this risk is likely to be best retained by the public sector at this time. A limited form of Design and Build project, with performance targets, may be possible and indeed has been tested as part of the *Water Conservation Investment Programme*.

The *Serviced Land Initiative* is designed to open up land for residential development by facilitating sanitary services, roads and other infrastructure. The Government contributes about 40 per cent of the project costs, with local authorities contributing 60 per cent of the cost (mainly from development levies). There may be scope to extend this initiative to help address the strategic infrastructure gap.

Transport
The scope for private sector involvement in projects in the transport sector has been greatly increased by the publication of a *New Institutional and Regulatory Framework for Public Transport* (August 2000) by the Minister for Public Enterprise. This paper provides the broad framework for institutional and regulatory changes to be introduced. These changes are outlined below:

In relation to the bus transport system the Government proposes to implement the following new institutional arrangements:

- Bus Átha Cliath and Bus Éireann will be established as separate independent companies and the existing geographical restriction on their area of operation will be removed.
- The State will divest itself of ownership of at least one of the bus companies. This is likely to be Bus Átha Cliath.
- Further legislation will be drafted and enacted by 2002 which will provide for the transfer of Bus Átha Cliath to the private sector.
- Franchising the core network will begin in late 2003/early 2004.

In relation to the rail transport system the Government proposes to implement the following new institutional arrangements:

- Iarnrod Éireann will be divided into two independent companies – one responsible for the railway infrastructure and the other responsible for the operation of railway services.
- The railway infrastructure company will remain in State ownership. Consideration will be given at a later stage to transferring ownership of the company responsible for the operation of some or all railway services.
- Consideration is to be given in the longer term to franchising the maintenance of the railway infrastructure.

In relation to roads, a total of eleven schemes in the National Roads Improvement Programme have been identified by the NRA for development as DBOF contracts, and a further three schemes as DB contracts. The DBOF contracts are expected to have a long term concession period, in the order of 30 years, during which the concessionaire can recoup the large construction and on-going operation costs by the collection of tolls.

4: Implementing the Strategic Plan

Cork Docks Redevelopment

The future of the Port of Cork revolves on two interdependent proposals on the future relocation of the ports' activities to Ringaskiddy and the alternative land use of the upstream vacated site. The Port of Cork has a significant interest in the success of the future development of the City Docks. While a direct role in this development is outside of the remit of the Port Authority, it can enter into arrangements with private sector developers whereby the Port of Cork can benefit in the future. The level of return anticipated from these developments will influence the level of debt, equity and grant support required to finance the future activities of the Port of Cork. However, options are limited because the Port of Cork owns little land with development potential.

In considering the funding options for the development of the vacated port site, the two most important determinants will be non-financial. These are:

- Co-ordinated planning - All providers of finance, whether debt, equity or grant will want to ensure that there is a well developed and integrated Plan for the area, through which the objectives of their investment are capable of being met.
- Certainty - Funders will wish to see a degree of commitment in relation to the implementation of the Plan. This includes commitment in relation to transport links and other infrastructure development, as well as policy commitments in areas such as housing and industrial development, housing and taxation policy.

Other important issues to be dealt with in assessing the funding options for the vacated City Docks include:

- Sponsoring Authority - The development of the vacated land sites may be best served if it is sponsored by a single agency, such as the Dublin Docklands Development Authority in Dublin.
- Land Acquisition - A co-ordinated approach will be required in order to create land bundles.
- Cross Subsidy - The Port of Cork may require funding to finance its activities. The ability of the vacated lands site to meet these funding needs will need to be assessed, although this may be limited given the Port of Cork's limited land holding at City Docks.
- State Support - The State can provide financial and other support through industrial policy, tax policy and grant assistance. The level of support required, and optimal delivery mechanisms need to be established at an early stage.
- Control of Process - The development process should be programmed so that the area is integrated into the wider City development.

Potential for PPP

There is considerable potential for a PPP approach to be taken to the broad projects identified in this Plan. There is already precedent in Ireland for using this approach, and these and other PPP possibilities are highlighted below.

Sanitary Services

The Department of the Environment and Local Government has approved over 20 projects to be

procured using the PPP approach as DB, DBO or DBOF contracts. Among these approved projects are the Blarney/Mallow/Fermoy Grouped Scheme (DB), the Cork (Treatment) Main Drainage (DBO) and the Cork Water Supply (Lee Road Waterworks) (DBO) projects. There are now many organisations in Ireland with either direct or indirect experience of bidding for and implementing PPP contracts. Much of the experience of indigenous contractors and operators is in the area of DBO contracts, whereas international contractors and operators are experienced in the application and use of private finance. Very few Irish banks have direct experience of financing projects of this nature, and so (where appropriate) they are likely to use advice and experience of their sister companies in the UK to enable them to participate in the market.

Overall, there is a high level of interest in the refurbishment of water headworks. This is a reflection of the view that PPPs will be used to implement a large proportion of public infrastructure projects in future years, and the desire of private sector companies to develop their credentials and establish a strong market position as soon as possible.

Private sector companies have expressed concern at the number of individual schemes that are currently being taken forward by local authorities. Some are of the view that the market is likely to become saturated, and that later projects may have difficulty finding and attracting credible private sector contractors that have the remaining capacity to tender for and implement further projects. To remedy this, local authorities should consider bundling schemes (both within and between local authorities) to increase the size and attractiveness of projects and to reduce the number of projects out to tender at any one time.

Transport

The removal of restrictions will offer opportunities for private bus operators to compete on the routes. Equally, the separation of Iarnrod Éireann into two independent companies presents opportunities for the provision of rail infrastructure and associated services. There has already been a considerable amount of activity among private transport companies in assessing the opportunities in Ireland, and the Department of Public Enterprise is developing a framework to allow for their participation.

Interested Irish companies are likely to include companies that are currently within the CIE group, as well as existing private bus operators. Foreign companies are also likely to be interested. It should be noted that many UK operators are currently seeking other opportunities, in order to defend against the possibility of failing to retain existing franchises.

It is also important to be aware of the commercial development potential of the train stations in terms of commercial / retail / residential developments. The development of these facilities using a PPP approach may change the net cost of the transport infrastructure. A co-ordinated approach to planning could well impact on the commercial development potential of these sites.

In relation to potential new roads projects, a North West Link including the bridge over the River Lee, or either of the indicated two new road bridges over the River Lee to Docklands may lend themselves to a PPP approach involving finance, where some of the cost of the projects might be recouped from toll charges.

4: Implementing the Strategic Plan

Cork Docks Redevelopment
Experience in Temple Bar, Custom House Dock and Dublin Dockland has demonstrated that the private sector can be steered to deliver public sector strategic planning objectives where a co-ordinated and integrated approach is taken to planning. This has often involved a degree of pump priming on the part of the public sector development agency, in order to ensure that the necessary transport, communications, environmental services and other utilities infrastructure are in place.

The use of this approach may be adapted for the Cork Docks Redevelopment by using schemes such as the *Serviced Land Initiative* (SLI), which links the provision of the infrastructure with the development proposals. Under the SLI, the Department of the Environment and Local Government contributes to the cost of infrastructure within the development. A further important consideration is the arrangements that developers can come to with the Port of Cork, which will cater for some of the future funding needs of the Port of Cork.

Summary
The current *National Development Plan* (NDP) covers the Tranche 1 implementation period (2000–2006). The authorities will be able to apply for funding (or part funding) for sanitary services and transport under the following NDP measures:

- Waste Water Treatment Measure.
- Water Supply Measure.
- Management and Rehabilitation of Infrastructure Measure.
- National Public Transport Measure.

Improvements and new construction of National and Primary and Secondary Routes come under the remit of the National Roads Authority's programme to 2006, which has an extensive budget.

There is considerable scope for private sector involvement in the implementation of the Plan: in the provision of sanitary services; roads and public transport; and in the delivery of the Docklands and other major new developments. Also, it is Government policy that private finance should be used in the financing of infrastructure projects to accelerate the programme and contain risk. As a result all major projects should be progressed and packaged in a manner that will be attractive to the private sector. Preferred options for private sector involvement should be agreed at an early stage in implementation.

4.5 Monitoring

This strategy document contains baseline assessment data providing a current profile of the state of the Cork economy. The data have been projected forward on the basis of best available information at this current time. To keep policy well informed it is important to maintain and update these data on an on-going basis. In order to monitor the progress of the strategy we have set out below a series of indicators against each of the principal policy objectives.

There has been a substantial growth, even proliferation, in the use of indicators across a wide range of public service and economic activities. Indicators for health, education, 'Best Value Indicators' and Sustainable Development Indicators are just some that have entered the policy lexicon in recent years. The increasing use of indicators to measure policy progress is welcome, but care should be taken that they do not become an end in their own right. "Indicators are signals. They are tools to simplify, measure and communicate success" Indicators need to be both appropriate and measurable.

To be appropriate they must accurately reflect the policy objectives that Cork City Council and County Council, together with their partners, are trying to achieve.

To be measurable requires that the data be available, either through existing published sources or readily collected or compiled from information that is not yet used for this purpose. Bespoke data collection and survey is also possible, though this is expensive. Being measurable also requires that the data are available at both the frequency and level of spatial disaggregation required. There are a number of other characteristics that make for good indicators:

- Acceptability - The indicators must be accepted by those who will use and apply them and ultimately be judged on them. The framework and work already in train through the United Nations has been adopted here.

- Availability - The data must be either easily available from existing sources or be easily collected for the specific purpose.
- Limited in Number - Indicators have been linked to a few headline measures in order that they can be widely usable for policy-making purposes. This attempts to provide a focus for the large number of potential indicators.
- Comparability - Comparability implies like for like comparisons. This goes beyond standardisation of indicators and definition. It includes collection, collation and reporting methods. It is important to develop definitions and methods which are theoretically sound, practically feasible and above all consistent across measure and place.
- Clarity - A further quality, particularly where an indicator is being used to define eligibility is that of clarity. An indicator should be simple and unambiguous. The current criteria for Objective 1, eligibility, is a good example of clarity in an indicator. The allocation is to the poorest regions as measured by GDP per capita and the decision making process is both transparent and beyond question. This is a strength, although the criticism of simple indicators is often that they fail to identify complex issues. But the simplicity of the indicators, which is a strength, also has a corresponding weakness in that it does not necessarily target the areas of greatest need.

Selected Indicators

One, or in some cases, two key monitoring indicators have been set out against each of the identified policy objectives, which have been classified under each of the seven key goal themes. The indicators are designed to enable progress against each of these objectives to be monitored. At this stage, no targets against which to measure progress have been set, apart from their obviously directional nature. Examples of the types of indicators might be, say, inward investment as a minimum proportion of the Irish total, or increase year on year by x per cent; that the unemployment rate in the worst ward is no more than twice that in the best; or that investment in new public transport averages €xm over five years (always allowing for the fact that financial indicators must also be proven as efficient and cost effective).

These are not the only indicators that matter, nor should they become the end in their own right. They are designed as headline indicators to provide a manageable number at the strategic level. As with the strategy itself they should be monitored and reviewed to ensure they are providing the right direction for the strategy. Beneath these headline

indicators a secondary set of indicators can be developed, which provide a greater qualitative depth and wider range of information. These can be monitored and reviewed at a more technical level to inform progress and development of the strategy.

4.6 Next Steps

In summary, the next steps for implementation are as follows:

- To progress a place marketing initiative.
- To ensure that the Strategic Plan informs and is reflected in the Retail and Housing Strategies; the City and County Development Plans; and the City and County Development Board Strategies.
- To put in place the proposed institutional arrangements.
- To prepare Action Area Plans, and technical and financial feasibility studies.
- To tap into the National Development Plan for Tranche 1 part-funding and to progress and package major projects with a new to private sector involvement.
- To improve partnerships and networking with a view to efficient implementation and effective place marketing.
- To commence monitoring immediately.
- To establish a benchmark baseline for selected indicators.

4: Implementing the Strategic Plan

Table 4.2 **Monitoring Framework**

Goals	Policy Objectives	Monitoring Indicators
(1) Economic growth Create a highly competitive quality location so as to facilitate the growth of an innovative and advanced (but balanced and robust) economy.	01. To promote an innovative, advanced, high value-added and high wage economy 02. To retain a robust, well balanced economic structure 03. To create an internationally oriented and highly competitive location	I1. GDP I2. Employment by sector I3. Inward Investment
(2) Social inclusion Promote social inclusion (especially within Metropolitan Cork) by improving access to public transport, education and jobs.	04. To create access to employment opportunities for the most disadvantaged members of the community 05. To improve access to facilities and services, including education, health, community services and utilities	I4. Unemployment Rates by Ward, long term unemployment I5. Nos. of people more than 30 minutes from Education, Health and other facilities; % of students staying on to third level education
(3) Environment Enhance the environmental quality and landscape setting of the Cork sub-region, minimise impacts on ecologically sensitive areas and on built heritage and cultural landscapes.	06. To minimise impact on ecologically sensitive areas 07. To minimise impact to cultural heritage, character and setting of the City, towns and villages 08. To promote the sustainable use of resources 09. To minimise the effects on rural landscape character 010. To ensure ready access to open space and natural landscape	I6. Loss of agricultural/woodland/ natural conservation areas I7. No. of buildings listed I8. Waste arising and management I9. Annual percentage change in Land Use type I10. Proportion of the population that live within 1km of an open or green space
(4) Balanced spatial development Include the City, its satellites, Ring Towns and rural settlements as part of a balanced settlement system with all levels of development in accordance with varying economic potential.	011. To deliver equivalent benefits to the entire area 012. To locate appropriate economic activity in smaller settlements or centres 013. To avoid excessive routine commuting 014. To create a polycentric location pattern within Metropolitan Cork	I11. Difference in unemployment rates between best and worst; Nos. of people more than 30 minutes from education, health and other facilities I12. Employment change by centre I13. Average journey to work length in kms I14. Ratio of employment in centre to centre; housing completions by type and centre

Table 4.2 **Monitoring Framework** (contd.)

Goals	Policy Objectives	Monitoring Indicators
(5) Urban renewal Recognise the City as the heart of the sub-region. Promote a high level of economic activity in the City centre and ensure that the housing stock and urban services retain their attractiveness in general balance with the suburbs. Synthesise urban renewal with conservation of historic form and character.	O15. To promote the City centre as the major area of comparison shopping, services and culture in the region O16. To promote regeneration of run-down urban areas O17. To provide high quality public transport to reinforce the role of the City centre	I15. New retail floorspace in City centre I16. No. of new residential dwellings, improvements to existing dwellings, sq m of commercial floorspace built in priority areas I17. New public transport investment
(6) Transportation Maximise the use of fully accessible public transport by co-ordinating building form, use and density with high quality bus and train services as well as regulating cars and other traffic. Promote walking by improving the pedestrian environment.	O18. To ensure the provision of a well functioning, integrated public transport system O19. To ensure the provision of a defined standard of the public transport, at reasonable cost O20. To ensure the timely and cost effective delivery of the accelerated investment in infrastructure O21. To reduce car dependency	I18. No. of passengers I19. Journey time and reliability through customer satisfaction surveys I20. New public transport investment I21. Mode share for access trips to designated centres
(7) Infrastructure Minimise the cost of providing water, sewerage, electricity, gas and telecommunications services to the population.	O22. To maximise the use of existing infrastructure O23. Minimise the cost of new service provision and operation	I22. % of capacity use of existing infrastructure I23. Cost per unit of new provision

B

SUPPORTING ANALYSIS

SUPPORTING ANALYSIS

B

5.1 National Context

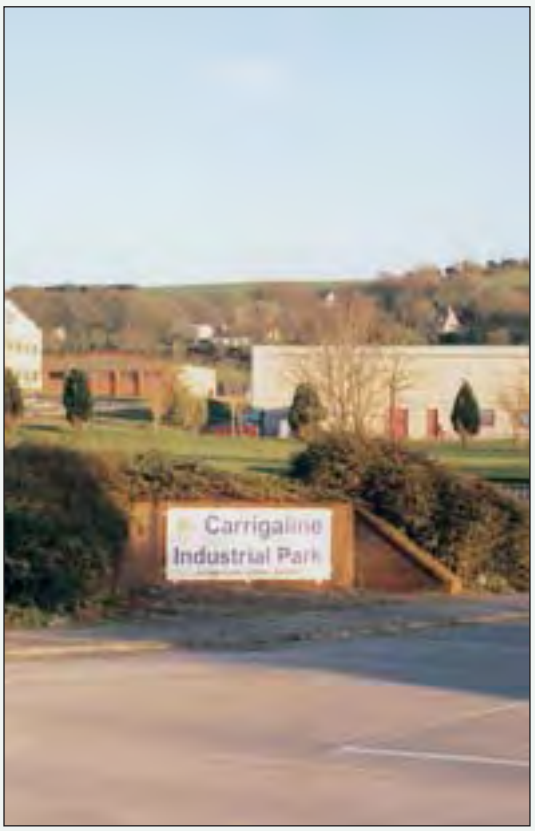
The economy of Cork is influenced greatly by the performance of the national economy, which has grown extremely quickly in recent years. The following table illustrates the extent of this growth.

Table 5.1 **National Growth**

Year	GDP %	GNP %
1997	10.8	9.4
1998	8.6	7.9
1999	10.8	8.2
2000	11.5	10.4
2001	6.8	5.2

Source: Ireland - Stability Programme Dec. 2001

The scale of the above economic growth, which is the highest in the EU, has resulted in the Irish economy expanding by 51 per cent since 1995. In 1987 income per head in Ireland was approximately two-thirds of the EU average level. In 1993 Ireland still qualified for EU aid under the cohesion package agreed under the Maastricht Treaty to raise the GDP of countries with a per capita GDP of less than 90 per cent of the EU average. By 1999 Ireland had exceeded the EU average per capita GDP.



In 1987, when total employment was 1.11 million, there were fewer employed in Ireland than in 1926. However, by 1998 the numbers at work had soared to 1.46 million showing a 32 per cent increase. In the same period the unemployment rate more than halved and this trend has continued to its current rate of less than 4 per cent.

Furthermore, employment growth has been in a broad range of sectors with Ireland having by far the largest growth in industrial employment in the EU, a high proportion of growth in permanent jobs, and a higher proportion of growth in full-time rather than part-time employment.

Table 5.2 **Economic Indicators**

Ireland's Economy	1991/1992 %	2000 %
Per Capita GDP/EU GDP	68.7	106.0
Inflation	3.2	5.6
Unemployment	14.7	4.3
National Debt/GDP	98.0	38.6

Many international economic commentators attribute the "Celtic Tiger" performance of the Irish economy over recent years to the high levels of EU financial transfers. However, while the level of EU support is one of the key elements contributing to the performance of the economy, it needs to be considered in context. It is acknowledged by the OECD in its annual economic survey on Ireland (1999) that over the past decade Structural Fund receipts from the EU may have raised growth by between one quarter and one half of one per cent annually. In fact the ESRI's own analysis suggests that the Single Market initiative was a far more important economic growth promoter, being responsible for 3 times more growth than the structural funds.

5: Economic Development Projections

Some of the other main factors that are generally accepted as having contributed to the growth of the Irish economy include the following:

- Stabilisation of public finances since 1987.
- Social partnership incorporating three-year centralised wage agreements.
- Significant and continued investment in education and especially third level education including technological education and training.
- Foreign Direct Investment (FDI)– sophisticated targeting of selected overseas industries and market sectors.
- Introduction of internationally competitive corporate tax rate (12.5% from 2003).
- Membership of EMU.
- The discipline imposed by the five-year community support framework to promote a useful form of long term planning for the economy.
- Rapid expansion of the labour force, increased participation and population growth.

As one of the founder members of the EMU and the only English speaking one, Ireland can offer significant advantages including the elimination of exchange rate risk transaction costs, consistently lower interest rates and a generally more predictable economic environment in which to operate. Ireland has thus become an attractive location for Foreign Direct Investment (FDI).

5.2 Local Context

Historically, Cork City has functioned as the Capital of Munster, and an international gateway to the South West Region. The City is regarded as the key (but not sole) driver of the prosperity of a very wide region. Cork is also the second largest city in the State.

In the last 30-35 years, the City-Region has evolved through cycles of relative growth and recession, especially the slump in the 1980s and early 1990s, to the current period of unprecedented economic growth. The present boom represents a degree of challenge and opportunity, as well as intense pressure that has not been felt before. The City-Region is prosperous and this has lead to the growth of satellite towns/suburban centres in what is becoming Metropolitan Cork. The larger Ring Towns further afield are showing varying rates of growth. They are generally prospering, at present, despite their greater dependence on an agricultural hinterland.

Cork City is not generally perceived as having kept pace with the improvements evident in other cities in Ireland or in comparable cities elsewhere, and this trend must be addressed.

In response to economic growth and likely expectations over the next 20 years, both Cork and the City-Region will need to adapt quite significantly in order to effectively compete in a rapidly changing international market. Trends towards decentralisation of power, urbanisation and liberalisation of global markets have established cities and their regions as the engines of growth in the global economy. To achieve its aspiration of 'going for growth' and building on its remarkable strengths, Cork will need to re-double its efforts to -

- Compete for the investment of capital technology and management expertise.
- Compete in the provision of IT and communications, infrastructure and services.
- Compete in attracting new industries and businesses.
- Compete in the pricing and quality of utilities and services.
- Compete in producing and attracting an appropriately educated labour force.

5: Economic Development Projections

The challenge to be faced is about accommodating the growth in population envisaged for Cork and the City Region, and the jobs that are driving the escalating rates of in-migration. Critically, the challenge for the Strategic Plan is also to accommodate the growth in a sustainable manner that is complementary to the aspirations of both investors and local communities. In this respect, the role of Cork City centre, the wider Cork City-Region and the key Ring Towns in adapting to the demands of the economy and society is fundamental. Successful regions throughout the world depend on a mutually inter-dependant balance of a thriving, buoyant and attractive key City, and an equally successful and diverse network of satellites and free standing market towns, which, in combination, offer a varied and interesting urban and rural "product" which will attract investment while being increasingly able to improve the quality of life for residents and businesses.

In responding to the challenge of potential continued growth and prosperity the pivotal role of a thriving City region needs to be both recognised and accommodated. Economically buoyant and physically attractive major urban areas are the key drivers of regional economies in the modern world. At present, much of the new investment for property and business development is going into the periphery of Cork - the Airport, Douglas, Carrigaline, Little Island, Mahon and Ballincollig. A successful spatial development strategy will bind these areas into a Metropolitan Cork, which will have excellent infrastructure. Effectively, Metropolitan Cork will become the key driver and will truly enable Cork to function more effectively offering investors a properly integrated and well connected pattern of economic development. Development should seek to capitalise on this "natural" economic growth centred on Cork and its immediate hinterland, and there is clear evidence that both investors and businesses wish to locate in or near central Cork. This is where development is currently taking place. This trend will continue as the area experiences significantly higher future growth in finance, banking and services, which are located mainly in major cities. Growth in education will also locate relatively centrally. These sectors require access to an extensive, skilled labour market through close proximity to nearby housing and public transport links (mainly rail) together with a more extensive wider labour market area.

There is scope for some peripheral housing and economic development. This economic activity will take the form of smaller scale manufacturing and service businesses performing a more localised service function. The spatial development strategy will need to incorporate quite large scale expansion in some of the Ring Towns with better locational characteristics and therefore in a position to attract new investment.

An important component of the future strategy underpinning the future of the Cork City Region, will be to correctly identify the key economic development themes that are apparent in the City-Region economy, and on these foundations support business development and a thriving economy with a development programme that will deliver the necessary property products. These two points are addressed overleaf.

5:

Economic Development Projections

5.3 Key Economic Development Themes

The recent economic achievements which have underpinned Ireland as a competitive location for international commerce including Foreign Direct Investment have resulted in Ireland being the selected location for:

- 7 of the world's top 10 software companies.
- 9 of the world's top 10 pharmaceutical companies.
- 10 of the world's top 15 medical device companies.

Ireland is now perceived as the European Market leader in software, with 40 per cent of all PC packaged software sold in Europe (including 60 per cent of all business application software) being produced in Ireland.

As part of the above achievement, Ireland has attracted 27 per cent of all US manufacturing investment in Europe and 40 per cent of all US electronic investment in Europe since 1980.

The Role of Education
Investment in education in Ireland has played a key role in fostering the development and sustaining the current knowledge based economy. The quality of Ireland's education is exceptionally high. In the ten years, up to 1998, the number of students in full- or part-time third level courses increased by 72 per cent whilst the number of post graduate students more than doubled.

In particular, 60 per cent of third level students graduate with engineering, science, or business degrees with a significant number of students being proficient in more than one language. For example, Ireland can boast the highest number of computer science graduates per 100,000 in the OECD. In fact, the number of software engineers has increased from 500 in 1996 to a projected 2,400 by 2002.

The availability of a well educated, highly skilled young workforce represents an important competitive advantage for Ireland and particularly for Cork to offer employers and inward investors

Clusters of Excellence
The IDA's current strategy in relation to job creation is to create clusters of excellence that it describes as areas in which groups of companies, corporate and academic research facilities, venture capitalists and others would congregate to foster innovation and entrepreneurship. They cite the National Micro Electronics Research Centre (NMRC) at UCC as an excellent example of what can be achieved. The IDA emphasise the need to use our skills in the area of educational research and the importance of building

better links between industry and our educational institutions. Counting job numbers is no longer the best measure of success. High value jobs and the regional location of these are now the important measures of achievement in an economy with near full employment.

Recent Developments in Cork City-Region
Over the last two to three years there has been a significant amount of new commercial and industrial development in the Cork City-Region, particularly round the outskirts of Cork City. Significant road improvements (e.g. completion of the Lee Tunnel linking the South Ring Road with the Dublin and Waterford arterial routes - N8 and N25 respectively) have opened up new development areas at strategic locations. There is now a growing supply of office parks around the boundaries of the City.

An important component of demand is the substantial growth in technology-based companies utilising information and communication technologies (ICTs) as a key business platform. Another component of future potential market demand is the emergence of Internationally Traded Services (ITS). With the fairly limited size of Ireland's local market, the activity of exporting products, goods and services will be critical for much of the future growth.

The primary employment growth sectors currently include healthcare, pharmaceuticals, Information and Communication Technology (ICT) and International Traded Services (ITS). Cork has been one of the primary foci for growth and innovation in these sectors with a substantial number of these industries locating in Cork. Cork City Region incorporates the third largest concentration of pharmaceutical companies worldwide.

Internationally Traded Services
The ITS sector in particular is viewed by the Irish economic agencies (Enterprise Ireland, Forfas, IDA) as constituting a key component in the further

development of Ireland's economy. This sector has major potential for creating extra wealth, exports and high quality employment.

The ITS 2007 Strategy produced by Enterprise Ireland points to the influence of the 'foundation' technologies of informatics and biotechnology enabling the growth of ITS activities in Ireland, particularly for Informatics; Digital Media; E-Business; and Healthsciences. ITS 2007 has a major regional focus, placing intervention as a necessity to draw future growth and development away from the Dublin area. Cork represents one of the key areas for focusing future growth of ITS sectors. For the ITS growth objectives to be met, key place development requirements include:

- The ability to exploit the commercial potential of research and development at Ireland's universities.
- Access to high bandwidth telecoms services at global competitive costs.
- Adequate transport infrastructure
- The availability of suitable accommodation - wired buildings and flexible lease arrangements.
- The availability of a high quality of life (good housing, education, social, sporting, entertainment and cultural amenities)
- The availability of a pool of skilled labour.

Techonology Hubs

One of the main infrastructure recommendations of ITS 2007 is the establishment of a number of technology hubs throughout Ireland. These hubs aim to generate a critical mass of high potential start-up companies that are high R&D and export performers. The other pre requisite for driving forward Cork's economy, based on the twin forces of technology and globalisation of markets, is the provision of broadband telecommunication services. The availability of competitively priced broadband international connectivity is a fundamental requirement for Cork businesses - in particular, for e-commerce, software, and multimedia businesses.

This established track record of furthering and facilitating the development of successful FDI businesses in Cork has been achieved through the co-operation of the development agencies, the local authorities and the local educational institutions and their research facilities. It is upon the foundation of these and other remarkable strengths that the Cork region will build its future.

Six Key Themes

Given this background, six key economic development themes have been identified which could underpin a planning and development strategy for the City Region and ensure that the local economy is in a position to aspire to achieve the sectoral economic projections as set out in the 'central forecast' (this and the demographic projections are discussed in the following chapter). The six themes are summarised briefly below.

- First, the Study Area should exploit the foundation technologies of semi-conductor design, informatics and biotechnology. These key enabling technologies will help to underpin the growth of knowledge-based activities. For example, the pharmachem base of the area provides an excellent infrastructure resource for addressing the opportunities being provided by the increase in outsourcing within the health sciences sector of core competencies such as R&D, manufacture, and sales. Equally, while Dublin is the focus for the development of a Digital Media District, Cork should begin to develop a cluster area for digital media activities.

- Second, in relation to high bandwidth telecoms networks, while Cork is connected to Ireland's backbone network (and will benefit when the backbone provision is enhanced from the current 2.5 Gbit to 40 Gbit), the local loop

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Economic Development Projections

access still needs to be addressed, and the most effective way of rolling out broadband services is to install the local access network to key cluster areas where there is a critical mass of users for broadband services. It will be important to ensure that small businesses, homes and schools gain access to broadband, as well as the large corporates.

- Third, the increased use of teleworking could be used as a means of reducing work-based trips and encouraging local employment opportunities in the more rural parts of the Study Area. The development of telecentres at strategic locations where mobile workers can utilise ICTs on a shared basis to undertake their work, should become a feature of the area. While it is unlikely that people will want to work at home full-time, increasingly many knowledge-based workers wish to work a couple of days a week at home or at neighbourhood telecentres.

- Fourth, the City Centre is the key asset for the City Region and its robustness needs to be sustained to ensure that it remains a driver of the area's economy. The re-use of vacant buildings should be a major priority and the move to a services-based economy will provide opportunity for re-use by leisure industries such as pubs and restaurants. The development of a new office zone (with perhaps financial inducements to attract major occupiers) will provide a major employment generator to help maintain the City Centre's image and sustainability. Digital media clusters tend to form within City Centre environments and a Digital Media District could be encouraged within Cork City Centre.

- Fifth, the university zone within the southwest sector represents a key driver of the area's future economy. This 'knowledge zone' has potential for expansion and, to encourage area regeneration, it needs to expand across the River Lee to the north. Knowledge sharing is best delivered through face-to-face contact, and therefore geographic proximity and interconnection play a key part in the exchange of ideas and transfer of innovation. While the university campus is the most appropriate location for fundamental (basic) research, applied research and development activities can be located off-campus and co-located at facilities such as innovation centres and science parks. It is important, however, that these locations are close to and easily accessible to the university campus.

- Sixth, as well as the attraction of FDI to enhance the local economic base, the growth of indigenous businesses should also be a high priority. With the strong emphasis on developing knowledge-based companies, the necessary property infrastructure needs to be in place. This means wired buildings with flexible lease arrangements to allow fast-growing companies to expand their office accommodation as appropriate. For start-up operations the provision of incubator facilities will be an important feature. For the established serviced office businesses such as the traditional professional activities (law, accountancy, consultancies, etc.) the ability to expand easily, in part, requires the availability of modern office accommodation at a range of prices in a variety of City or town locations.

5.4 Development Requirements

To facilitate this economic development, a range of property products will need to be brought forward. This will require partnership between various departments of the City and the County Councils, Irish inward investment agencies, and the private sector.

Manufacturing Floorspace - There will be significant changes in property provision for the manufacturing sector. There will be an improved quality of accommodation and a broad range of specific property types. There is also likely to be rationalisation of the older industrial areas, including possibly, the heavy engineering, metal production, and pharmachem production areas. These larger industrial areas will offer the scope of smaller scale business development and provision of mixed use development. Existing contaminants on-site normally entail relatively costly remediation works.

Warehousing Floorspace - To exploit Cork's growing role as a distribution node, modern warehousing space will be required. While the traditional industrial estates located round the south ring road and at Little Island offer mixed warehousing/commercial units, dedicated distribution parks providing the appropriate large sizes, heights, and specification of warehouse units are required. The transport focus of the airport provides a major opportunity for a high profile distribution park, which demonstrates Cork's international logistics capabilities. In addition, a distribution park located on the north or east side of the City (the gateway for Limerick and Dublin traffic), utilising the rail connection afforded by the area and the potential of the northern distributor road, could also provide a regional logistics facility for the City Region.

Business Parks - The letting success of the Cork Airport Business Park helps to demonstrate the demand for business park space in the area. Business parks are most likely to be edge-of-town, and future business park developments should be able to offer a choice of transport (including public transport links) and good access to the airport. This is likely to be more achievable in locations that are reasonably accessible to key transport nodes and existing settlements.

Technology Parks/Innovation Centres - The science and technology base of Cork is a key component for future growth, bringing high-skill, high-wage jobs. Innovation and new technologies are an essential element for creating new economic value, and Cork needs to ensure that it can accommodate such activity at appropriate locations. The Cork Business and Technology Park currently meets this demand. However, additional development land will be required over the Plan period for technology-based activities.

City Centre Offices - City centre office accommodation in Cork is at near 100 per cent occupancy. The City needs to significantly enhance its City centre office stock if it is to capture its share of international traded services. The International Financial Services Centre (IFSC) in Dublin provides a successful model for this aspiration. High density, large, open-plan, IT capable office space is a key requirement for Cork city centre. Cork must achieve a mix of uses centred around high density offices, supported by housing, leisure, and public transport facilities in order to achieve vitality and viability.

Local Office Centres - As well as the large city centre office supply, the City Region will have to offer small office space to accommodate local services provision. This may be located within the Ring Towns, Satellite towns at suburban or local centres, or at business parks. This smaller scale office provision will be for sizes of 50 square metres up to 500 square metres. It is forecast that indigenous office demand is going to increase significantly in the short to medium term, reflecting the national and regional growth in service sector activities.

Telecentres – Telecentres are serviced offices providing drop-in facilities for teleworkers living in the local area. For mobile workers who utilise information technology and 'hot-desking', the provision of a local telecentre for drop-in working, client meetings, and video conferencing, helps to reduce the extent of commuting to work and reduces the number of car trips. Telecentres are usually located on the edge of major metropolitan areas and within rural areas adjacent to key urban centres.

Incubator Centres - To support the growth of local start-ups, the provision of small, easy-in/easy-out space will be advantageous. Incubator space, which offers flexible, cheap and small space with shared services/space and business development support, is a means of addressing this requirement. Typically, units in an incubator centre will range from 20 square metres up to 300 square metres. Incubator space can be located at a variety of different locations.

5:

Economic Development Projections

5.5 Development Principles

Clearly, it is not appropriate to seek to attain the full range of property products throughout the Study Area. Development needs to respond to specific locational characteristics, the transport network, and fundamentally, market demand. Having said that, it is possible for supply-led initiatives to stimulate certain property market segments. It is important to encourage key sectors by means of a high quality supply of new space.

A number of key principles were identified, underpinning the location of future industrial and commercial floorspace in the Study Area. These are intended to provide indicative property development principles to guide the way in which planning strategies distribute the future pattern of development activity. The eventual delivery of the new locations to meet demand will be achieved firstly, through the zoning of appropriate locations that reflect demand requirements (current and emerging); secondly, through the infrastructure to make these locations capable of accommodating property development; and thirdly, in some cases, through advance build provision in order to secure FDI projects for Cork. The key property development principles can be summarised as follows:

(i) To create a new office district in Cork City centre to meet the large scale office requirements for the growing sectors.

(ii) To promote smaller scale office development, including local health, education and social services in the north City-Mallow axis in order to gain access to the large population catchment, to address social inclusion issues, and to draw benefit from the rail infrastructure serving the area.

(iii) To encourage further development of technology and innovation activities for technology-based companies that want to be located close to Cork Institute of Technology and University College Cork. There is also scope for technology and innovation activities in the City and sites such as the Docklands, Ballincollig town and the Killbarry area.

(iv) To encourage development of specialist distribution parks close to the airport and the main arterial route leading north out of Cork.

(v) To encourage further industrial and commercial development along the N25 corridor to Midleton and Carrigtwohill.

(vi) To encourage the location of major FDI manufacturing plants at large single user sites at key strategically located Ring Towns - Mallow, Fermoy, and Midleton, and smaller facilities at Bandon, Macroom and Kinsale.

(vii) To promote the development of incubator type facilities to support the clustering of business start-ups, the clustering of start-up activities should be focused at particular appropriate areas such as Ballincollig for technology-led activities, Cobh and Blackpool for creative industries activities, and Douglas for professional services; and finally

(viii) To provide for local office centres at the larger Ring Towns (e.g. Mallow and Fermoy) and Satellite towns (e.g. Ballincollig, Blarney and Cobh).

5.6 Tourism

In recent years Ireland has experienced an unprecedented level of growth and at a faster rate than most of its competitor destinations. The Cork/Kerry region is the most popular tourism area in Ireland outside Dublin, attracting more than one in four of overseas visitors to the country. In 1998 an estimated 988,000 foreign tourists visited County Cork - almost half being from Britain, with one in four from mainland Europe and one in five from the US. These visitors spent an estimated 4.86 million bednights in the County resulting in expenditure of close to 267 million. While Cork City and its immediate environs attracts the higher number of visitors, West Cork is the more popular tourist area within County Cork and would account for a greater number of bednights.

Irish residents, including Northern Ireland, accounted for an estimated 900,000 bednights in the area in 1998 (approximately 400,000 in Cork City). This indicates that the domestic market is responsible for approximately one third of all visitor bednights in the Study Area.

There are nearly 9,000 hotel beds in the Study Area, 45 per cent of which are in Cork City. The Study Area includes four main day visitor attractions which each attract over 100,000 visitors per year. Visitor numbers to Study Area attractions are increasing. Blarney Castle is by far the single most popular day visitor attraction, and is well established on touring itineraries, with a high proportion of visitors from overseas, especially from the US. Fota Wildlife Park is the next most important visitor site in terms of visitor numbers. A high proportion of these visitors are local or Irish residents. Cork City has few day visitor attractions – Cork City Gaol, the Gunpowder Mills and Shandon Cathedral – although the latter lacks interpretation. The Queenstown Experience (at Cobh), the Old Midleton Distillery, and Cork City Gaol have opened within the past 12 years and each has been successful in attracting a growing international visitor demand, and creating a reason to stop and visit in Cobh and Midleton. In addition to these attractions, the Study Area hosts a number of successful festival events - for example, Cork Jazz Festival, Ford sailing week, Kinsale gourmet week.

Taking account of the Study Area's current market position as a popular tourist environment, but without single key destination attractions such at Killarney or Kilkenny, and the prospect for continued tourism growth to Ireland, the estimated potential growth in bednights spent in the Study Area is from some 3 million at present to 5.6 million (the central scenario). There is considerable potential for Cork City to play a more important role, acting as an access gateway for the wider Cork/Kerry tourism area. The City has the potential to be far more attractive. Although it already hosts a number of events, the City lacks a brand identity, and offers little excitement or points of interest for tourists.

The wider Study Area is scenic, with a limited number of known attractions but generally lacks a strong identity as a tourism area. There is further scope to improve the tourist product in West Cork and widen the appeal of North and East Cork with the introduction of activity based holidays and an improved range of hotels, guest houses and self catering cottages, (which should be integrated with local activities).

SUPPORTING ANALYSIS

B

6: Population & Employment Projections

6.1 Introduction

This chapter summarises the population and employment projections for the Study Area over the Plan period, and the requirements of these projections in terms of land and property.

6.2 Projection Methodology

A long term, sustainable pattern of growth and development in the Study Area requires a balance of population and jobs in the future. An excess of population over jobs will encourage a return to high unemployment rates combined with longer distance out-commuting for job opportunities; conversely, an excess of jobs will lead to increased in-commuting and escalation of house price inflation as migrants compete for scarce housing resources. The need to achieve a balanced rate of both population and job growth is a fundamental theme of the strategy for Cork.

Clearly there is some longer term uncertainty as to the potential for continued economic growth at rates which have been achieved over the last few years. There is also a debate nationally as to the potential scale of population growth resulting from in-migration to Ireland. Population and economic change are closely linked. Economic growth both stimulates population growth (mainly, but not solely, through migration) and requires additional economically active people in order to sustain continued growth. An integrated approach to population and economic forecasting is essential, based on:

- Common macro economic assumptions.
- A realistic view of the scale of migration which can be sustained locally through growth in jobs.
- Cross checks which convert the projected population to a potential labour force which matches independently calculated employment change.

This integrated approach has been a cornerstone of the study methodology. For ease of explanation, however, population projections are described first and then the economic projections.

The output of this exercise is a series of projections of population, households and labour force on one side, and on the other, employment change distributed by economic sector. These forecasts then translate into requirements for additional housing and buildings for manufacturing, warehousing, offices, etc. In addition, the Strategic Plan will need to take account of retail and tourism development requirements, the operational requirements of the airport, the port, and provision of a full range of community facilities.

Thus, following the projection of population and economic activity, this chapter sets out broad guideline estimates for development requirements. These, in turn, are translated into land requirements. This exercise is described in the last section of the chapter.

6.3 Population Projections

Baseline

The population of the Study Area remained static at about 314,000 between 1986 and 1991. The natural increase of the population as a consequence of births was cancelled out by emigration from Cork. Between 1991 and 1996 the trend in out-migration halted and the population of the Study Area grew to nearly 325,000. Between 1996 and 2000 the consultants estimate that the population grew to 346,000.

The major change that is occurring is an accelerating trend of in-migration to Cork. This is a national trend and is partly driven by the return of Irish migrants. The birth rate is declining, so the growth which is taking place is largely the product of in-migration.

The underlying growth in the resident population of the Study Area is given an additional twist, when translating into numbers of households, due to the reduction in the size of households and the increased rate of household formation. This means that for any given level of population growth there will be even more new households. In the Study Area there were 99,365 households in 1996. By 2000 the consultants estimate that the number of households had grown to some 110,270.

6: Population & Employment Projections

Within the Study Area there are major growth differentials with sizeable migration flows between different parts of the area. This is a familiar picture of a central city, more or less stable in population, surrounded by rapidly growing suburbs and a rural fringe that shows elements of population decline alongside localised growth. Key points to note can be summarised as follows:

- The City of Cork had a steady loss of population from 1986 to 2000.
- Most of the Study Area's growth was concentrated in the suburbs, in Douglas, Carrigaline, Ballincollig, Blarney, Riverstown, Glanmire and Midleton.

The rural fringe lost population between 1986 and 1991 and gained little in the following five years. Between 1996 and 2000 however, it grew very rapidly - in absolute and percentage terms, almost as rapidly as the suburbs. Growth rates were generally high in the Ring Towns of Kinsale, Bandon, Macroom, Mallow, Fermoy and Youghal, but varied widely in their hinterlands.

Analysis of the age distribution of the Study Area population indicates that the population of the area is beginning to grow older. In the City, because there was population loss through migration of households, the population is relatively older than in the Study Area as a whole. The relatively old population structure implies that household formation growth and demand for new dwellings will be slower in Cork than relatively younger areas, for example the Galway and Dublin sub-regions.

Projections

Projection Model

The basic inputs to the population projection model are:

- The starting population, which is the age/sex structure of the Study Area derived from DED-level information from the last Census (1996).
- The fertility and mortality inputs from the 1999 Central Statistics Office (CSO) projections, with adjustments for locally registered births and deaths.

Total fertility is set lower than the national average to replicate local registrations, as is life expectancy. Mortality and fertility rates are already low. They are unlikely to increase and they cannot decline much further.

These components of the forecasts pale into insignificance against the uncertainty about future migration. The Study Area's migration history is closely related to the country as a whole. From 1986 to 1991, when the Republic lost migrants, so did Cork. From 1991 to 1996, when the Republic had a zero migration balance, Cork had modest migration gains. And since 1996, when the Republic has gained by migration, Cork has captured a substantial proportion of these gains. There is a policy debate at the national level about future levels of migration, so an important task is to explore future migration scenarios, and consequently three migration scenarios have been projected.

For each of these scenarios – in addition to population - estimates of the size of the labour force and the total number of households were calculated. The labour force estimates were obtained by applying CSO age/sex specific activity rates to the projected age/sex structures. For the household projections Study Area household headship rates were derived from the 1996 Census and applied without change to the projected age/sex structures.

Medium Migration

This first projection assumes steadily declining net migration from the recent average of 3,600 persons per year to 2,950 per year in the period 2001-2006; 2,200 per year in 2006-2011 and 1,450 per year thereafter. This is in line with the latest CSO national projections and the ESRI Mid-Term Review, which is considered to be the most plausible outcome and, as will be seen, it accords with the central employment forecasts. The results of this projection are illustrated in Figure 6.1. Further details are given in Appendix E. The medium migration scenario population projection is summarised in Table 6.1.

Growth in households will be more dramatic than population growth, rising to 159,600 in 2021, an increase of 45 per cent over the current level of 110,300. The labour force will rise 161,700 in 2000 to 206,500 in 2021.

High Migration Scenario

The high migration scenario projection assumes a continuation of current levels of net migration into the Study Area (3,600 per year) until the end of the Plan period. As such it is in line with the Report of the Inter-departmental/Agency Group on Immigration Policy. It should be noted, however, that these sources had a medium term view extending to 2006 only. It is debatable whether current exceptional levels of economic growth and international migration can be sustained for 20 years. The results of this projection give a population of 380,400 by 2006, 409,000 by 2011 and 458,900 by 2021. Under the high migration scenario the number of households in 2021 is projected to be 172,800 and the labour force to be 227,700.

Figure 6.1
Population Forecasts (Medium Migration)

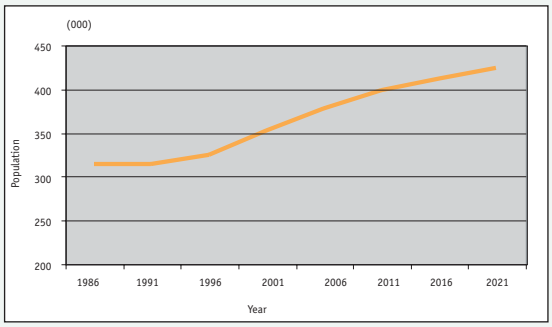


Table 6.1
Summary of Medium Migration Scenario Population Forecasts

Year	Total Study Area Population
2001	351,700
2006	377,000
2011	397,800
2016	412,000
2021	423,000

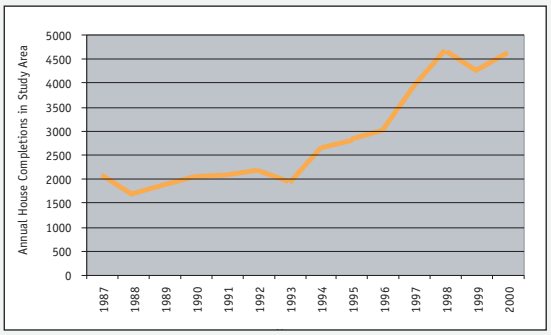
Low Migration Scenario
The low migration scenario projection assumes a rapid decline in net migration to the Study Area down to zero in 2006-2011 and thereafter. It will be recalled that when the Republic had a zero migration balance – between 1991 and 1996 - the Study Area still experienced net migration gains of about 700 per annum. This scenario therefore implies a major reduction in economic growth and migration balance at the national level. From 2006 the picture shows a return to GDP growth below the EU average and return to net migration out of the Republic. The results of this projection give a population of 370,900 by 2006, 379,600 by 2011 and 387,100 by 2021. The number of households in 2021 is projected to be 146,300 and the labour force to be 185,900.

6.4 Land and Property Requirements for Housing

In April 2000 the housing stock of the Study Area amounted to some 120,000 dwellings. More than a quarter of the dwellings have been built since 1986. Probably well over 80 per cent are owner occupied. There are 9,000 local authority dwellings. The private rented sector is probably smaller - in 1996 there were 7,300 people living in flats or bedsitters and since then there has been significant construction of private rented accommodation for holiday homes and similar purposes. The voluntary sector (for example, housing associations and co-operatives) is as yet of negligible size.

Private house completions in the Study Area are currently running at between 4,000 and 5,000 per annum. Figure 6.2 illustrates trends in housing completions between 1987 and 2000. Nationally, house prices have more than doubled over the last decade and Cork is no exception. Housing affordability is now an important issue for first time buyers.

Figure 6.2
Housing Completions 1987 - 2000



Source: DoELG Housing Statistics Bulletins

The central (medium migration) population projection shows a net increase in the number of households of 49,300 in the period 2000 and 2021. It will be necessary to plan for a greater number of dwellings than projected net increase in households, in order to allow for a frictional vacancy rate (5 per cent of new dwellings constructed), and to account for the incidence of second homes and holiday homes (one per cent of new dwellings). Replacement of losses to the existing stock through obsolescence, whether demolition, abandonment or change to non-residential use, is currently running at half a per cent of the total stock per annum. This allowance for obsolescence must also be added to the total number of dwellings planned, at least in the early stages of the Plan period (Tranche 1). Thereafter, obsolescence is expected to be negligible.

Thus, taking the central projection, the medium migration scenario would require the development of 56,000 new dwellings over 20 years at an average annual rate of 2,800. Since the medium migration scenario assumes a gradual tailing off of migration to the area, the rate will need to be somewhat higher at the beginning of the period. An average of about 4,000 dwellings per year will be required for the first Tranche, with the first few years of this six year tranche probably requiring an above average output. This is well within the capacity of the local house building industry, which is currently producing in excess of 4,500 dwellings per year within the whole of the City and the County areas.

The housing development programme that is eventually implemented will be highly influenced by a host of political, social, economic and market

6: Population & Employment Projections

variables which will exert strong demand side pressures. In particular, we highlight the importance of two recent developments which have arisen during the course of the study. First, the Department of the Environment and Local Government (DoELG) is co-ordinating a National Spatial Strategy which could directly influence the distribution of population and jobs as between Dublin and the key regional growth centres. Second, the publication of the third Bacon report on the Housing Market in Ireland in mid 2000 indicates the potential for additional housing provision in order to achieve a "catch up" in unmet housing demand. Account needs to be taken of these two additional factors which could induce a higher range of population and household growth than envisaged in our demographic and economic projections, especially over the next six years which can be considered a period of transition. Consequently, in Chapter 2 we set out the justification for planning for a higher range of housing provision in the short term.

Size Distribution of Future Housing

An important variable in determining the required housing development programme and the accompanying land requirements is the size distribution of future housing. The household numbers in the central projection give an average household size of 2.65 by 2021, far lower than the current Study Area average of 3.1, and in line with trends in other European countries.

Based on the projected future demographic structure a potential housing size distribution for the future development target of 56,000 new dwellings over 20 years can be set, as shown in Table 6.2.

Table 6.2 **Target Housing Programme 2020**

Household size distribution		Urban housing size distribution		Suburban housing size distribution	
1 person	27%	1 bed	15%	1 bed	5%
2 persons	34%	2 bed	35%	2 bed	20%
3 persons	16%	3 bed	35%	3 bed	40%
4 persons	16%	4 bed	10%	4 bed	25%
5+ persons	8%	5+ bed	5%	5+ bed	10%

This broad mix of future house sizes will have implications for the type of housing and density that is planned for, and the ultimate price at which housing is sold. This leads directly to the issue of affordable housing.

Social and Affordable Housing

The Planning and Development Act 2000 specifies that up to 20 per cent of residential land be reserved

for special needs and affordable housing, but the percentage of dwellings will normally be higher because of differences in density. Planning authorities may make the granting of planning consent conditional on the transfer to them of this percentage at existing use value. The land is then to be used for housing provided by the planning authority, approved bodies such as housing associations, or the beneficiaries themselves. Alternatively, the developer may transfer serviced sites or completed dwellings at a calculated price.

A Part V Housing Strategy for the County and the City area was prepared in accordance with new Department of the Environment and Local Government (DoELG) guidelines so that there will be wider choice of housing opportunities and tenure at affordable prices. This strategy has implementable projects to promote wider tenure diversification both to the south and north of Cork City – i.e. more social and affordable housing opportunities south of Cork and more low and middle market private housing north of Cork.

Housing Land Requirement

The implications of increasing the proportion of smaller dwellings in the future housing stock because of changing household structure will be to allow overall housing densities to be increased throughout the Study Area. This is in line with Government policy to minimise the loss of agricultural land and to reduce the per capita cost of providing services and supporting infrastructure. Higher densities are also necessary to support good quality public transport. However, it is important to emphasise that this does not imply a lowering of environmental conditions for new housing. Rather, the strategy will require far more attention be given to the quality of design and layout of new residential areas than has hitherto been generally achieved. This is discussed in more detail in Appendix C.

Land requirements may be estimated by calculating the gross density for each type of development, i.e. the amount of land required for housing plus an

additional area to provide local roads, open space and community facilities. The total housing land requirements could vary depending upon actual densities achieved and the increasing opportunities to create new dwellings through the conversion of large houses, the sub division of large plots, and the creation of dwellings above shops.

Average residential densities are expected to be highest in the City and in public transport corridors. In the centre of Cork, infill developments in the city centre should aim to achieve 200 dwellings per hectare (net) and in the Docklands about 140 dwellings per hectare (net). Elsewhere in the City, 50 dwellings per hectare (net) is considered an achievable target.

In Metropolitan Cork and the Ring Towns and rural areas, an average target of 40 dwellings per hectare (net) is proposed in the long term, although this may not be achievable in the early years of the Plan because of the high percentage of development that is already committed at lower densities. Table 6.3 summarises the housing density assumptions.

Table 6.3 **Housing Density Assumptions**

Category	Development Type	Cover%	Height (storey)	FAR[1]	Unit size (m^2)	Net Units per ha	% Area given to Plots	Gross Units per ha	Assumed Averages (units/ha)
1.	Apartments								
	Central area	30	6	1.8	80	225	75	170	150
	Subcentres	30	5	1.5	80	190	70	130	
2.	Town Houses								
	Inner	30	3	0.9	100	90	70	60	45
	Outer	30	2		100	60	60	35	
3.	Semi-detached & Detached (medium density)	25	2	0.5	125	40	55	20	20
4.	Detached (low density)	15	2	0.3	150	15	50	10	10
5.	Dispersed	1	2	0.02	200	1	90	0.9	0.9

1 Floor to Area Ratio

6:

Population & Employment Projections

6.5 Employment Projections

Study Area Employment
Employment estimates for the Cork Study Area were largely based on two main sources of information: the 1996 Census, which provides resident-based workplace data for the City and County; and the 1996 Cork City employment survey, which provides workplace data within the City boundaries.

Whilst in normal circumstances these might provide quite reasonable current estimates, the situation is complicated by the rapid economic growth which has taken place. Employment nationally has grown by roughly 25-30 per cent between 1996 and 2000, and growth in Cork is estimated to be at least of the same magnitude. The study therefore drew on additional sources such as labour supply estimates, changes in unemployment data and other survey based employment data to update and reconcile the estimates.

In 1996 resident based employment totalled some 114,790. In addition, there was net commuting in and out of the Study Area which translates into 128,600 workplace based jobs, of which 37.7 per cent were within the City.

To derive a year 2000 baseline employment estimate the consultants project forward from the 1996 data using the sectoral projections in the Economic and Social Research Institute's (ESRI) Medium Term Review 1999-2005. This gives 155,100 jobs in the Study Area in 2000, representing growth of some 20 per cent over these four years.

The structure of employment in the Study Area is similar to the State and consequently Cork's economy is likely to perform in a similar fashion to the national economy. Moreover, the Study Area has a well-balanced economy at present and is not overly reliant on any single sector of activity. It is potentially well insulated from potential unwelcome shocks. Key sectors of economic activity in the recent past have been pharmaceuticals, semi conductor design and information technology.

An important asset for the Cork City-Region is the presence of a growing tertiary education sector. The key institutions are University College of Cork, Cork Institute of Technology, Cork College of Commerce and St. John's College, Cork. The annual output of graduates from these colleges has increased from some 4,000 in 1989 to 9,000 by 2000. Well over a half of these graduates are subsequently employed in Cork or County Cork on leaving college.

This level of inward migration of intellectual talent has spawned the NMRC which has been a key driver of Cork's centre of excellence in semi conductor design. The universities are also leading research in information technology and health. Not surprisingly, health and education are major economic sectors in Cork and employ a significant proportion of the Cork labour force.

Projections
The basis of the employment projections used for Cork are the national employment projections published by the Economic and Social Research Institute (ESRI) in their 1999 Medium Term Review. This is compatible with the 'medium migration' population and labour supply projections. The approach which was adopted was to apply national forecasts of change - given in the ESRI sectoral employment projections - to the structure of employment in Cork.
Key growth sectors identified are:

- High technology processes and manufacturing.
- Services.
- Distribution.
- Transport and communications and
- Health and education.

Using this approach, if Cork is well represented with sectors which nationally are projected to show strong growth, then employment in Cork will grow quickly. Conversely, if Cork is under-represented in successful sectors and over-represented in declining sectors then there will not be strong growth in employment. Although the recent phenomenal rates of growth are not projected to continue in the long term, projected growth is nevertheless very positive across a range of sectors, and in particular in the service sectors.

Having derived baseline (year 2000) estimates, these are then projected forward for each of the subsequent periods on the basis of the ESRI sectoral forecasts. In order to be compatible with the demographic projections which are undertaken for Census periods the employment projections were adjusted to census years - i.e. 2006, 2011 etc.
In applying the projections, assumptions have been made based on the 1996 Census data about the proportion of activity in the chemicals and engineering sectors - that is high technology as opposed to traditional manufacturing. It is assumed that over the forecast period a higher proportion of employment in these sectors will be in the high technology component.

Central Employment Projection
For the period 2000-2021 employment is projected to rise by 46,220 to 201,280, an average of 1.3 per cent p.a. over the period. This compares, for example, with the period 1975-96, when employment in Ireland as a whole grew at an average of 1.0 per

cent per annum. A more detailed employment projection, by sector, is given in Appendix F.

Continued losses in the agricultural sector and in the traditional manufacturing sectors are more than offset by increases in the service sectors. The service sector will be the main source of employment growth. Currently, four out of every five new jobs created in Ireland are service based. This trend is expected to continue with employment in health and education, retailing, personal and professional services growing particularly strongly.

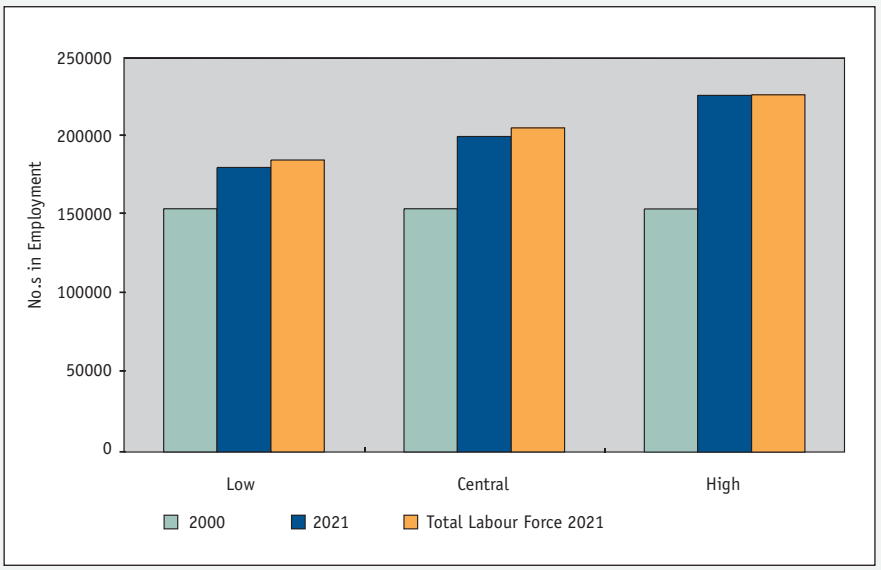
The strength of the pharmaceuticals and information technology sectors mean that there will be continued growth in some of the high tech parts of the manufacturing sector. But, despite the recent strong performance of manufacturing in Cork, as the economy matures an increasing share of employment will be taken by the service sector. In part, this is due to the potential for productivity gains in the manufacturing sector with higher levels of output being attainable with stable or falling employment. In part, it is a reflection of the global competitiveness of parts of this sector. Whilst Ireland has until recently benefited from this factor, issues such as EU tax harmonisation and expansion of the EU to eastern Europe might shift competitive advantages away from Ireland.

Alternative Scenarios

Two alternative employment scenarios were produced: a high and a low projection consistent with the high and low migration scenarios used in the demographic analysis. In each case they are based on the assumption of achieving full employment, or frictional rates of unemployment of around 2.5 per cent. In reality, varying rates of employment growth are likely to produce differential levels of unemployment, but given the current tightness of the labour market and the need to match migration with job availability it is reasonable (for planning purposes) to assume frictional rates of unemployment. In the high growth scenario employment would grow by 72,000 jobs to 227,032 between 2000 and 2021, an average rate of 1.8 per cent per annum. In the low growth scenario employment would increase by 26,400 to 181,400, an average of 0.8 per cent per annum.

A comparison of the three employment forecasts is presented in Figure 6.3. As can be seen even for the 'low' scenario there is still a substantial growth in employment. This chart also illustrates the labour force projections from the demographic analysis indicating an unemployment rate of around 2.5 per cent. The high growth scenario assumes that about 5,000 workers would regularly commute into the Study Area. Given the forecast profile of jobs growth and the very low unemployment rates, the availability of a supply of labour is essential if Cork's potential is to be realised. This raises questions as to the rate of migration, provision of affordable housing and the skill level of the future labour force to match the requirements of emerging economic growth sectors.

Figure 6.3 **Comparative Employment Scenarios**



6.6 Commercial Land And Property Development Requirements

The Scale and Type of Development
The commercial property industry generally takes a relatively short term view of the future when planning to meet anticipated property requirements. This is for reasons which are largely due to difficulties in projecting far in advance for a rapidly changing sector of the property market.

In short, recent or current performance is not an entirely reliable guide to the future, especially a longer-term 'visionary' future. To provide a longer term perspective on the full economic development potential of the Study Area, there are three key sources of guidance to supplement the appreciation of current market trends: a review of past trends, an appraisal of projected employment changes and, an assessment of evidence elsewhere.

In the whole of Cork City and County, a total of some 274,000 square metres of offices and 129,000 square metres of industrial space have been permitted since 1996. This has been located at Model Farm Road, Fermoy, Ballincollig, Bishopstown, Little Island, Carrigtwohill and Blarney. In addition, some 45,000 square metres of industrial, warehousing and business park and office development has been constructed at Cork Airport.

In the period 1994-2000 the average volume of office and business space floorspace promoted through FDI in the City and Cork County area has averaged about 16,000 square metres per annum, of which 9,000 square metres has been in the City. In addition indigenous expansions and start-ups will have occupied new space. Since 1996 some 36,500 square metres of new offices and accommodation for internationally traded services has been constructed in Cork City. In the same period 68,800 square metres of factory space has been constructed in the City.

The second piece of guidance is the employment projections. These indicate that under the central projection there will be a net increase of some 46,000 jobs between 2000 and 2021, of which about 20,000 will require new industrial or commercial premises. The remaining jobs will be accommodated in educational establishments, the health sector, leisure activities, etc.

For the jobs that will be created in education and health sector premises and localised services, the net housing land requirement is factored up to a gross land take target. In other words these welfare and local service activities are dealt with as part of the programming of development for new housing areas.

Demand for directly generated business space is derived from the performance of the local economy. The level of development that will be necessary to 'house' the projected increase in workers is derived through the application of standard worker/floorspace ratios for the different economic sectors. Given the continuing high rate of economic growth predicted for the Irish economy, and for Cork - especially over the next ten years - and the clear shift to service based employment; there is a requirement for a major increase in office type floorspace within the Study Area. It is estimated that a total of 143,260 square metres of City centre/local office space and 112,809 square metres of business park space will be required.

The implication of the employment projections is that, in broad terms the Study Area is likely to require the level of additional floorspace provision set out in Table 6.4. This table also provides a broad indication of land requirements, based on standard assumptions regarding height of development and plot cover.

Table 6.4 **Commercial Property: Built Area and Land Requirement 2000-2021**

	Built Area (m^2)	Plot Cover	Average Height (Storey)	Land Requirements (ha)
Offices	143,260	50%	4	7.2
Business Park Space	112,810	25%	2.5	18.0
Incubators	6,090	40%	2	0.8
Technology Park Space	48,270	25%	2	9.6
Distribution Park Space	150,720	35%	1	43.1
Production Units	45,000	35%	1	12.9
Standard Indl./Warehouse Units	232,660	35%	1	66.5
TOTAL	**738,810**			**158.1**

The third piece of evidence as to the potential for property development in the Study Area, is based on experience elsewhere in other City regions, which are undergoing a rapid transition in the pace and style of property development as a consequence of changing economic conditions and growth of new economic sectors. The most notable example is Dublin, where take-up of office space in 2000 alone amounted to some 200,000 square metres. It is predicted that a further 320,000 square metres of office accommodation will come on stream in the Greater Dublin Area in 2001; 65 per cent of this space has already been let. Around 300,000 square metres of industrial space were taken up in Dublin in 2000 and over 140,000 square metres are due to come on stream in 2001.

Clearly, Dublin is not an exactly analogous City region, but if the Cork City Region is to consolidate its regional city function and perhaps achieve a higher share of "footloose" economic and population growth (perhaps in response to outcome of the National Spatial Strategy) then it will need to enhance its rate of office development. Historically the more constrained supply of land in the City and its higher cost/value compared with greenfield sites in the County have been reasons why Cork City has not achieved a more noticeable quantum of good quality office development. These constraints will need to be overcome in the future if the City centre is to function successfully as the prime office location.

The development requirement set out at Table 6.4 amounts to a little under 739,000 square metres of total commercial development and represents an average annual building requirement of almost 37,000 square metres. In the early years of the programme a higher rate of development of about 40,000 square metres per annum is expected reflecting the current levels of buoyant demand. The total land requirement is of the order of 158 hectares, averaging nearly 8 hectares of new development annually. Once again, it is expected that more land would be taken up in the early years of the Strategic Plan period and a clear focus will need to be given to office development in the City, fringe central locations and in the Docklands.

Retail Development

A detailed retail study was undertaken by Roger Tym & Partners for Cork County Council and Cork Corporation in 1997. This highlighted the rapid growth in consumer spending both in the State and within Cork, which was fuelling both the growth in demand for retailer representation and the development pressures which have emerged in the late 1990's. Since the retail study was completed, the Irish economy has grown even more rapidly and the consequent demand for retail development is

greater than before. Some 47,750 square metres of retail floorspace (net sales area) has been committed since 1997; the majority of this additional space is located on the periphery of Cork, where market demand is more focused.

The recently published Retail Planning Guidelines provide a new framework for dealing with retail development proposals. Amongst a range of new policy guidance there is a requirement for the County and the City to compete a joint strategic retail study by June 2002. This will be an important study given the buoyancy of the retail sector in Cork and the important role which it plays in the Study Area in providing services and employment opportunities for a wide range of the community.

The approach adopted in forecasting retail floorspace requirements is consistent with the general employment projections in that it is derived from the ESRI's medium term economic projections. This data source was the foundation for the 1997 Retail Study of County Cork which incorporated a six year projection to 2003 and rolled it forward to 2006 initially. This produced projections of both spending and floorspace requirements. For the longer term period after 2006, potential spending growth scenarios are simply outlined and the likely development requirements are discussed in qualitative terms.

6:

Population & Employment Projections

Short Term Retail Requirement (2000-2006)
Due to increased population migration and spending changes, the growth in spending in the Study Area is more than predicted in the original Cork Retail Study. This rate of growth in spending is likely to continue at least to 2006. Consequently, it is necessary to plan on the basis of more retail development rather than less. On top of the retail commitments there is a requirement for an additional 61,000 square metres or so of comparison goods sales floorspace up to 2006 and some 12,000 square metres (net sales space) of convenience goods shopping.

In projecting this aggregate quantum of development much depends on the split between different types of retail activity and the specific distribution of retailing within more locally defined catchment areas. It would also be necessary to determine precisely the in-town capacity of the key urban centres to accommodate retail development before planning for edge or out-of-centre development. An indicative guideline for the distribution of potential retail development, which takes account of established planning policies and the likely short term capacity of Cork City centre, is set out below in Table 6.5. In addition, some 22,000 square metres net retail warehouse floorspace will be required for comparison shopping.

Long Term Retail Requirement (2006-2021)
To provide a broad picture of what might happen up to 2021, the model was run with changed assumptions on spending growth. The results for the three main areas of retail activity are summarised below.

Table 6.5 **Guidelines for Potential Retail Development**

Area	Short-term (year 2000 – 2006) Retail Requirements (m^2 net floorspace)	
	Convenience Goods	Comparison Goods
City Centre	-	12,000
Suburbs, Satellite Towns & Miscellaneous	8,000	22,000
Ring Towns	4,000	5,000

Convenience Goods Provision
Some 12-20 supermarkets / superstores might need to be developed after 2006. This provision should match the distribution of new housing development in the Study Area and fill any obvious gaps in current provision. Development will largely follow market demand and, in general terms, is likely to be in the main area of population expansion in the metropolitan area of Cork and the larger market towns. In addition to the main grocery stores there will be a requirement for smaller town and village developments within the existing built up area, together with some specialist shop units to be provided ancillary to larger developments.

Fashion Oriented Shopping Provision
The future distribution of fashion oriented comparison shopping is critical. Potential locations include Cork City centre, the Market Towns (both the Ring Towns and the Satellite Towns) and purpose built, off-centre locations.

It is fundamentally important that a major retail development occurs in central Cork if it is to function effectively as a successful and popular retail destination. There is likely to be substantial expenditure growth up to 2021 and it would not be unrealistic to aim to promote up to 50,000 square metres of retail and associated floorspace. At this scale there would be a quantum improvement in the retail offer and Cork would have shopping facilities comparable to the best in Europe. Given the problems of assembling City centre sites and the costs involved, it is difficult to envisage major development coming forward within the current prime retail area of Cork. It thus becomes necessary to consider major edge-of-centre (not out-of-centre) locations which could be linked into the existing City centre, albeit possibly with river crossings. The choice of generalised location will be largely dependent on ease of accessing new development both by car and public transport, the relative connectivity with the existing City centre and the view which is taken of the feasibility of land assembly.

In addition to development in central Cork there could be potential for an equivalent quantum of space to match the growth in population and located within the main areas of new housing development. Good public transport accessibility will be a key requirement. It is likely that the bulk of new development will be in the largest Ring Towns and the emerging metropolitan sub-centres (Satellite Towns and Suburban Centres) closer to Cork. This additional provision might be distributed amongst six or seven locations.

Bulky Durable Goods Provision

The bulky goods sector of the retail market is somewhat under-provided both in Ireland and Cork. Current provision amounts to about 3 per cent of total comparison goods floorspace and currently only the new development at Ballincollig is committed. There is significant scope for additional provision. For example, mature retail systems in the UK typically have about 15 per cent of total comparison goods retail provision in the form of retail warehousing. Retail warehouses generally do not adversely affect town centres. There could be scope for some 40,000 square metres of additional retail warehousing. As far as possible retail warehouses should be located on the edge of or near town centres, district centres or suburban centres so as to ensure the benefits of additional trade linking into a nearby shopping centre. Retail warehouse development, as with convenience goods provision, draw from relatively localised catchment areas and should match the future distribution of population in the Study Area.

SUPPORTING ANALYSIS

B

7.1 Introduction

This chapter examines the capacity of the Study Area to accommodate the projected level of growth over the next 20 years. The starting point is a brief summary of the characteristics of the area, including spatial socio-economic data, environmental and infrastructural resources. This is followed by a more detailed review of the City and other settlements that comprise the Study Area.

7.2 Overview Of Environmental Resources

The main environmental elements and characteristics are summarised on Figure 7.1.

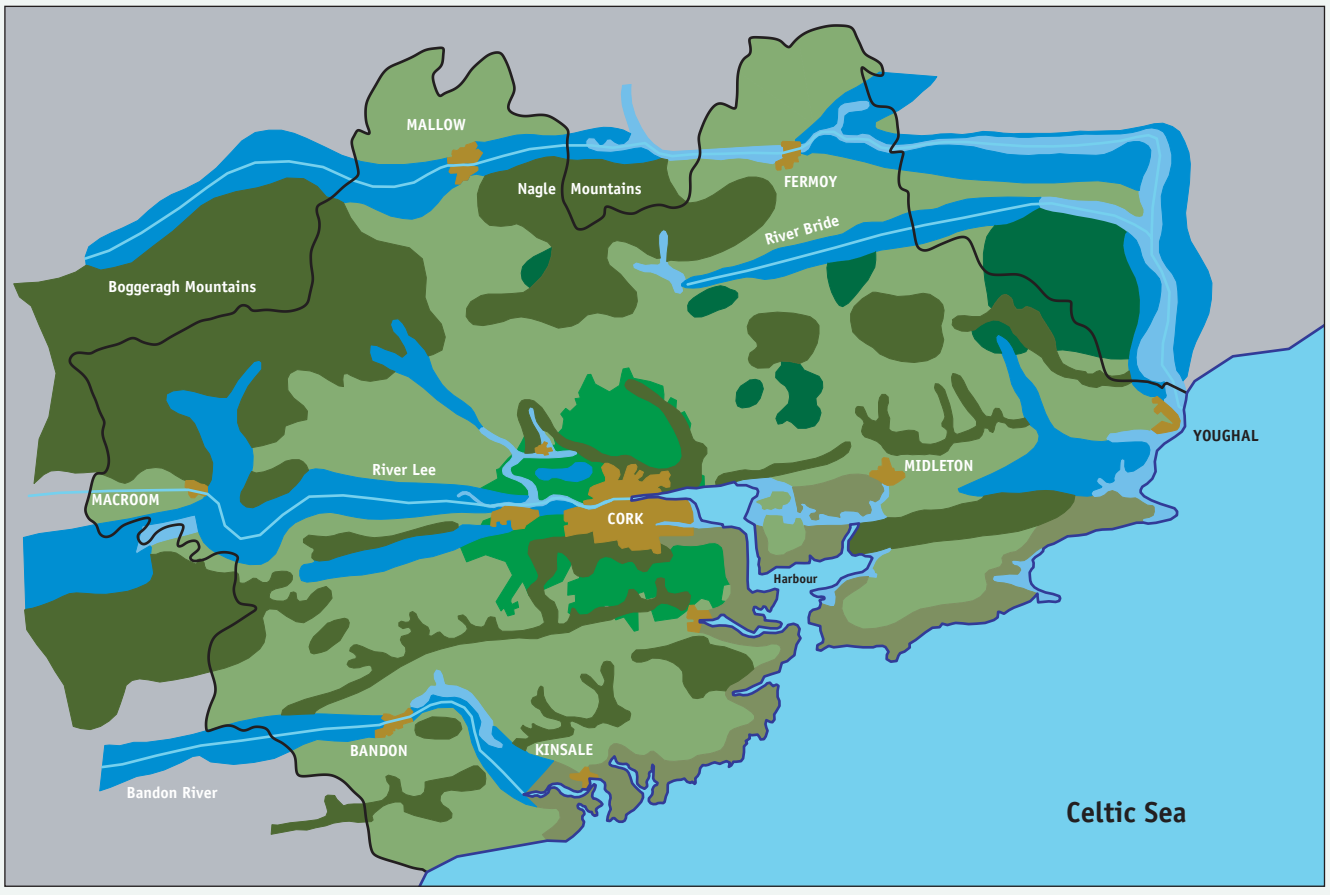
The Study Area is generally low lying, with land rising to a maximum of just over 400 metres in the Nagles and Boggeragh Mountains. The topography is characterised by the distinctive east-west orientation of the parallel ridges and valleys, typified by the Blackwater, Lee and Bandon Valleys. Glaciation has resulted in a highly irregular topography and land is often steep, with large areas of flat land being generally confined to the low lying and flood prone river valleys and coastal plains.

Legend

- Urbanised Areas
- Green Belt
- Steep or Hilly Topography
- Major Forest Areas not included in other Zones
- Areas of Designated Landscape or Scenic Importance
- Coastal Protection Zones
- Natural Heritage Areas Special Protection Areas and Nature Reserves
- Undulating Agricultural Landscape of Small Fields and Hedges

This plan is NOT intended to be site specific and indicates possible broad locations for future development.

Figure 7.1 **Environmental Context**



7: Development Capacity and Potential

Soil types in the City-Region give a wide land use capability and, coupled with a favourable climate, support both arable and livestock farming over most of the Study Area. As a result, local farm incomes in the area are amongst the highest in Ireland. Upland areas with poorer soils have been extensively planted with commercial forests in recent years.

Forest cover in County Cork is at about the national average, and is concentrated in west and north Cork. Cork County Council has prepared a strategy identifying areas sensitive to forestry, and this includes much of the Study Area.

The landscape of the Study Area is very varied and generally of a high quality. Although there is no statutory basis for the protection of areas of scenic beauty in the Republic of Ireland, a number of areas are designated in the Development Plan as being of scenic importance.

Guidance to local planning authorities has recently been issued by the Department of the Environment and Local Government (Landscape and Landscape Assessment, June 2000) in which emphasis is placed upon viewing and dealing with the landscape in a more comprehensive way. The County Council will be gradually undertaking a comprehensive landscape character assessment of the Study Area over the coming years.

Natural heritage policies in Ireland include three key 'official' designations: Natural Heritage Areas (NHA), Special Protection Areas (SPA), and Special Areas of Conservation (SAC). NHAs are the basic designation of the system and all other designations overlap with NHAs. SPA are aimed at the protection of natural habitats, fauna and flora, and the following designations have been made in the Study Area:

- Ballymacoda.
- Old Head of Kinsale.
- Blackwater Estuary.
- Cork Harbour.
- The Gearagh (Macroom).
- Ballycotton Bay.

The Special Area of Conservation (SAC) designation aims to protect natural habitats of EU importance and in the Study Area. The Gearagh (Macroom) and Ballycotton, Ballynamona and Shanagarry have been designated. Despite this, it should be noted that Ireland has the smallest area devoted to nature protection of any European country. Further work is required in the Study Area to properly further identify areas worthy of protection and designation and to increase resources devoted to implementation and enforcement.

The Study Area is rich in historic and archaeological landscapes, townscapes and man made features of great interest and cultural value. The rich heritage of historically resonant place names, townlands and monuments - both historical and pre-historical -are a testimony to longevity and diversity of the peoples and civilisations in the area. Also of note is the legacy of attractive towns and villages some of which rose to prominence and wealth during the 18th century, and which possess streetscapes and historic landscape settings of considerable value. Examples of attractive townscapes include all of the Ring Towns, larger villages such as Innishannon and Cloyne, and many very small settlements such as Castlelyons.

Elements of the built cultural heritage including archaelogical remains are formally protected, but the wealth of attractive and historically important buildings and structures in the Study Area is not consistently or adequately reflected in the protected building list. Elements of the non-built cultural heritage such as placenames and townland names are not formally protected. An inventory of national monuments and archaeological sites has been established on a county by county basis. A national programme to create a more comprehensive architectural inventory is currently underway and this should help identify additional buildings and structures worthy of preservation. The designation of formal town and village conservation areas and historic landscape settings in the development plan is now proposed under the Planning and Development Act, 2000. Widespread implementation of these provisions will be an appropriate way forward to provide further protection to the many attractive and important townscapes in the Study Area.

The Cork Green Belt extends from the city centre for an average distance of about 10 kilometres. Although a Green Belt is primarily a planning tool, it does much to protect environmental resources. In Cork it has been generally successful in retaining a landscape setting to Cork City and the harbour and has helped retain the distinct identity of the suburbs of the city by stopping urban sprawl and preventing settlements merging into one another.

Green Belts are often held to encourage the recycling of land in urban areas by stopping the easy option of spreading urban development into the countryside. Historically Green Belts have also played an important role in providing opportunities for recreation and sports within easy reach of densely populated areas, although this role has tended to become less important as car ownership has increased. Nevertheless although there has been some erosion of the Cork Green Belt in certain locations, and a degree of sporadic development allowed by the current system of exceptions, it is considered that Green Belt policy still fulfils its prime planning functions successfully.

7.3 Socio-Economic Overview

The Cork City region is the second largest urban area in the State after Dublin, and one of the more densely populated parts of the country. The distribution of population in the area is shown on Figure 7.2. (overleaf).

An analysis of the Study Area reveals that it is one of the most affluent parts of the country, with few disadvantaged areas, as can be seen from Figure 7.3.(overleaf). This shows that the only areas where there are any significant pockets of disadvantage are in parts of Cork City, in the north and, to a lesser degree, in the south of the City. The Northside of Cork City has one of the most significant concentrations of social and economic deprivation outside Dublin, and improving this will be a key objective of the Strategic Plan.

In the rural areas there are some less prosperous areas in the higher, less fertile lands but these areas are sparsely populated, so that the absolute numbers of people affected are fairly low. Confirmation of this general pattern of affluence or disadvantage is provided by data on the percentage population of households with two or more cars. In virtually the whole of the Study Area, apart from parts of Cork City and Youghal, over 20 per cent of the households have two cars, which means that the Study Area has one of the highest levels of car ownership in the country.

7.4 Transport Overview

Public Transport

Rail

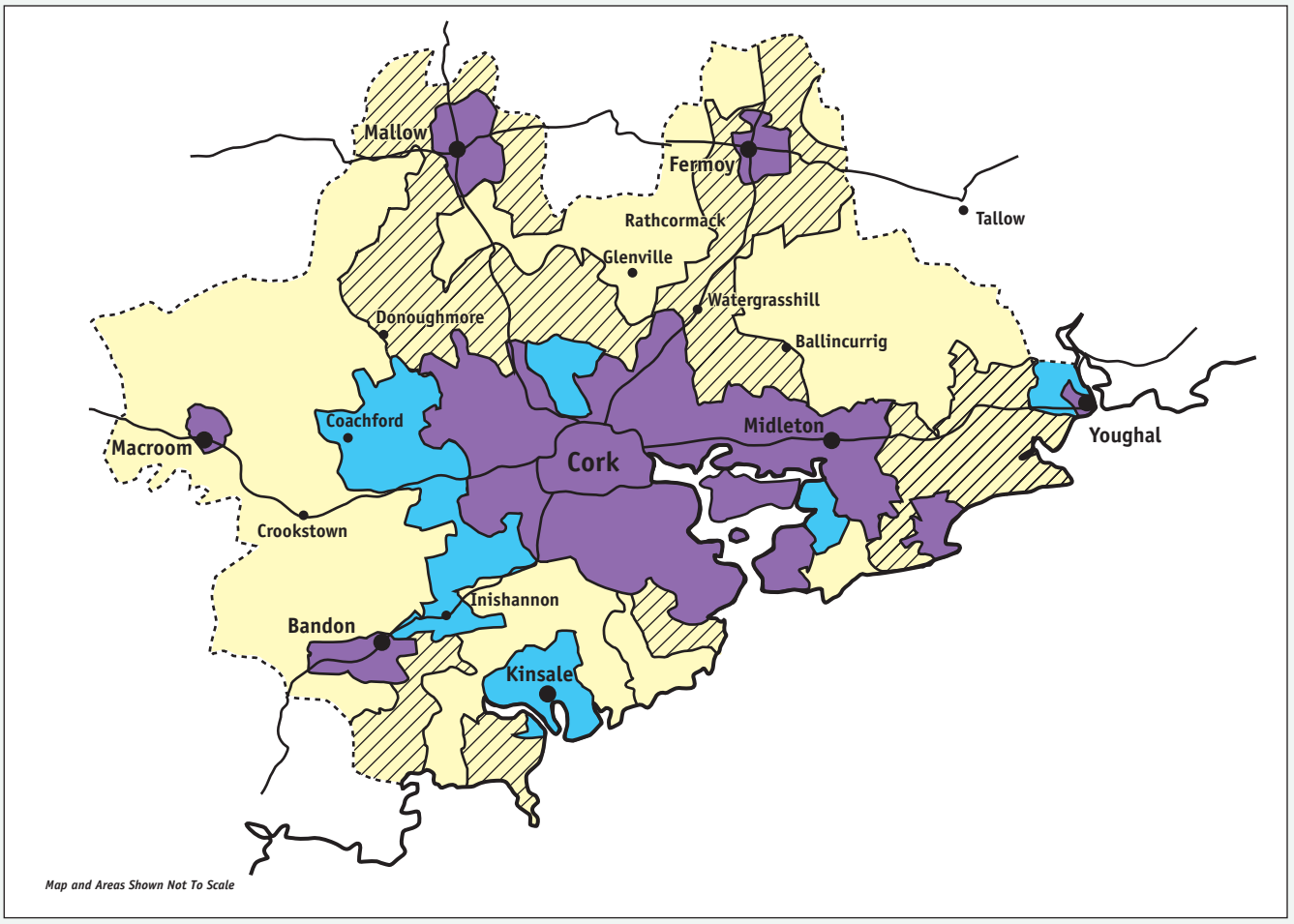
An hourly suburban rail service operates between Cork and Cobh, with one extra commuter service in the morning. Mallow is also linked to Cork by rail, as part of the mainline rail network, with some 10 services per day, one of which is timed to suit commuters.

Iarnrod Eireann is advancing plans to redevelop Kent Station and the surrounding area, in partnership with a private developer. This would improve access to the station by all modes, including by foot, by bus and by private car. The redevelopment also offers the opportunity to improve rail operations and introduce regular through-services.

In addition to the proposed station development, there is significant potential to upgrade the Cork Suburban Rail Network. A possible option that has been previously mooted is:

- Redevelopment of Kent Station to include safety and capacity improvements, and to allow through-running (trains from Mallow could continue to Cobh or Midleton). This should be undertaken as part of the station redevelopment.
- Two additional stations on the Mallow line, at Blarney and Kilbarry/Blackpool.
- New stations at Tivoli/Dunkettle and Ballynoe.
- The reopening of the disused section of line from Glounthaune to Midleton, with station(s) at Carrigtwohill.

Figure 7.2 **Population Density**



Following a review by the Cork Area Strategic Plan team and discussions with Iarnrod Eireann, it was concluded that the above scheme would be a sensible starting point for a public transport system for the north and east of the Study Area, subject to economic and technical feasibility.

Iarnrod Eireann has a policy of improving car parking at all stations, which is being actively progressed at several locations, including Mallow, Little Island and Glounthaune.

Bus

An extensive bus network operates in the Study Area. Although the coverage is good, many of the services, even in the City, offer an infrequent or irregular service, or limited hours of operation. Historic data provided by Bus Eireann showed that passenger numbers on services in the City declined slightly in the period from 1991 to 1999, at an average rate of one per cent per annum. Numbers of passengers on suburban services remained stable during the same period.

Since 1999, increased investment has enabled significant improvements to be implemented. New buses delivered in Summer 2000 have enabled the entire fleet to be updated, a new orbital service to be introduced, frequencies increased on some routes, and some routes extended. Where frequency has increased, a 20 per cent increase in patronage was rapidly recorded. Bus Eireann is expecting further delivery of new buses in the early years of the Strategic Plan and are seeking support from the local authorities in the form of bus priority measures, although no detailed proposals have yet been considered.

Legend

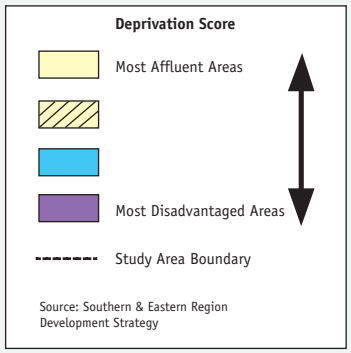
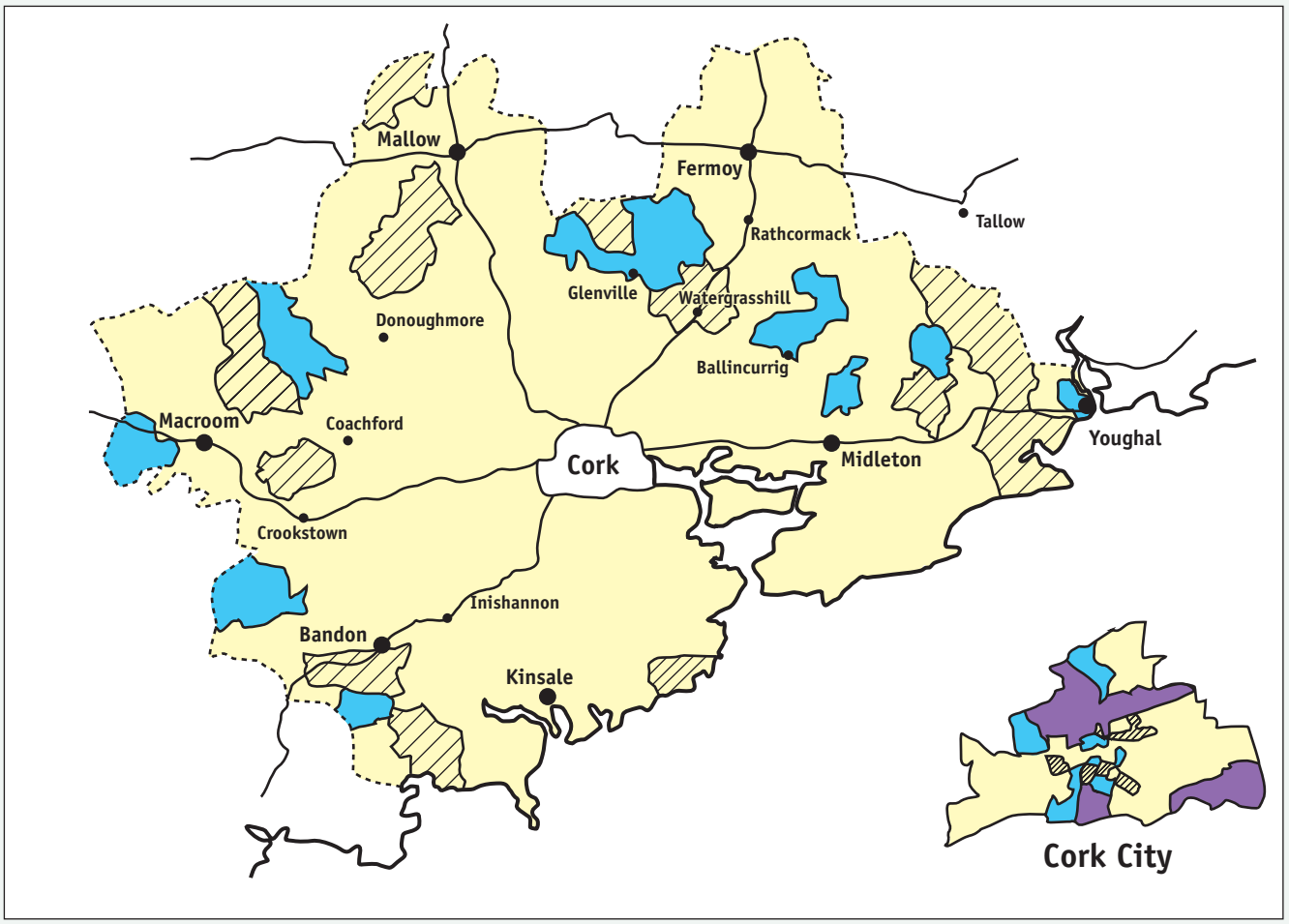


Figure 7.3 **Social Deprivation in the National Context**



7:

Development Capacity and Potential

Buses serving University College Cork and the Cork Institute of Technology, via the City, meet the main rail commuter services arriving at Kent Station in the morning.

Road Network

Cork benefits from a good road system which was developed as a result of the Cork Land Use and Transportation Study (1978). Notable road links built in recent years include the South Ring Road, the South City Link Road and the Jack Lynch Tunnel under the River Lee.

Historic data shows that total traffic flows on the key radial roads in the Study Area doubled in the period 1990 to 1999, as shown in Figure 7.4. From 1996 to 1999, traffic growth rose sharply, resulting in an average annual growth rate of 15 per cent.

Within Cork City, the historic trend has been for traffic to grow at a faster rate than forecast by LUTS, even in years with little economic growth (see Figure 7.5). The data indicates a 4 per cent reduction in traffic flows from 1998 to 1999, after the tunnel opened.

Figure 7.4 **Historic Growth in Traffic on Strategic Radial Routes**

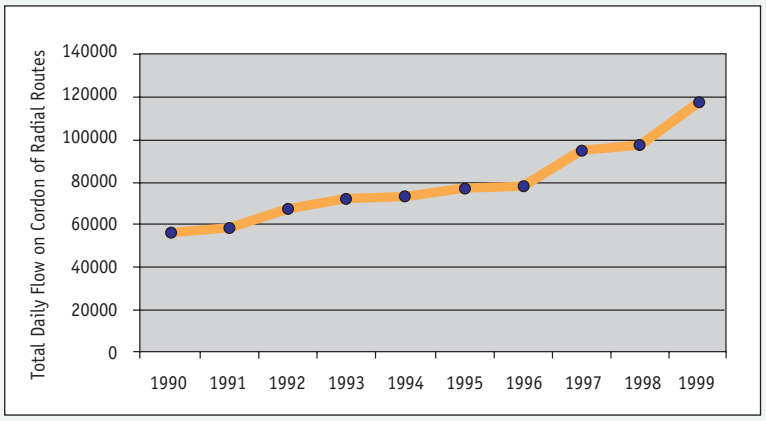
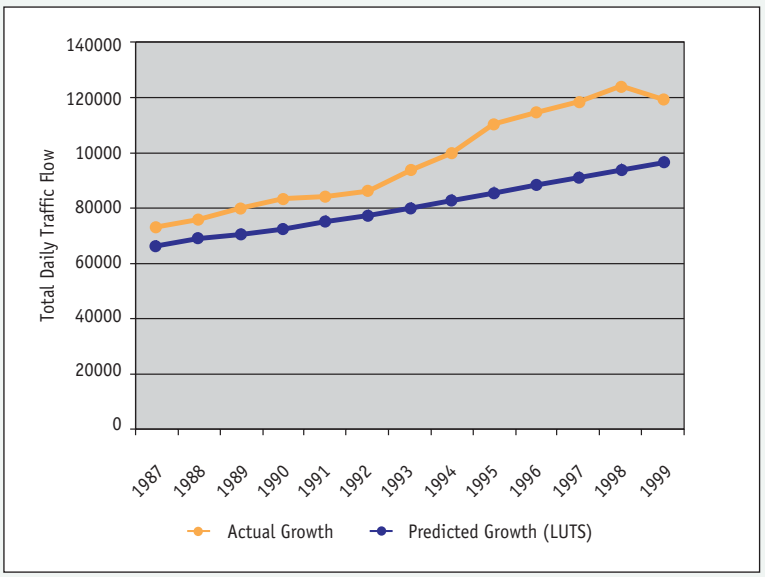


Figure 7.5 **Growth in Traffic within City**



Notwithstanding the reduction in traffic flows on local roads within the City area, the recent growth rate on the strategic routes is extremely high, and is not sustainable in the long, or even medium term.

Improvement schemes to address most problems on the main road network are currently proposed or under consideration by the local authorities and/or the National Roads Authority (NRA). These are summarised in Appendix H. Additionally, the NRA proposes upgrading of all the radial routes between the Ring Towns and the City.

Travel Demand in the Study Area

Travel demand is derived from demographic and economic demands, as well as other factors including car ownership and the availability of public transport. This section outlines recent trends in travel demand based on data from the Central Statistics Office (CSO), traffic counts, journey time surveys and public transport passenger data. Future transport conditions, based on the growth scenario set out above, are outlined.

Census data revealed that growth in travel throughout the Study Area was negligible in the period 1986 to 1991, consistent with low economic growth and high out-migration. Since then, demand for travel to work, school and college has grown substantially, with growth in the period 1991 to 1996 running at an average of 12.7 per cent per annum.

The Department of Environment and Local Government report a 5 per cent annual average growth in car registrations since 1991, with recent years to 1999 experiencing growth closer to 6 per cent, and possibly up to 9 per cent in 2000.

The rapidly expanding demand arises from the upward trend in population and economic growth. Although the growth is rapid across all parts of the Study Area, demand for travel is growing faster in the rural areas and suburban/outer areas than in the City and Ring Towns, reflecting the trend for development out of town. Census data also shows that, on average, everyone in the Study Area is travelling more, possibly twice as much. This is due to the increase in economic activity, as well as the trend for development outside the main centres.

Mode of Travel

The latest census data (1996) shows that, for the Study Area as a whole, some 57 per cent of all travel to work, school and college in the Study Area is by car. A further 28 per cent of travel is on foot or by bicycle, and 17 per cent on public transport (bus and rail). Travel by car is growing faster than any other mode, but there are also more people travelling by bus and by train. Use of bicycles and motorcycles has declined despite population and economic growth, possibly because of greater prosperity and car ownership.

Implications of Travel and Socio Economic Trends

The car dependent trend in Cork is fuelled by economic growth; rising car ownership; dispersed, low density development; a relatively high standard of road infrastructure and a historic lack of investment in public transport. The large forecast growth in population, employment and the increase in incomes, which enables higher rates of car ownership, will make matters disproportionately worse. Without a sustainable transport plan, traffic will double over the next 20 years. Peak hour travel speeds will fall to 5mph on most roads in the urban area. Journeys to work will take four or five times longer in many cases, so that two hour journeys to work from the suburbs to the City will not be unusual. The benefits of recent and planned road improvements will be rapidly eroded. Commuter traffic will dominate the road network, at the expense of its efficiency for strategic movement.

None of these predictions is unrealistic. One only has to look to Dublin as an example of how quickly the above scenario can emerge in circumstances of rapid development.

Provision of new roads is not generally a sustainable solution – it would only exacerbate the problem in the long term and adversely affect the City and the attractive network of the older towns in the Study Area. Instead, an approach is required that:

- Optimises the efficient use of existing infrastructure.
- Minimises the need for travel by integrating and balancing land uses.
- Encourages greater use of public transport by improving standards of service and provision and by restraining cars in certain situations.
- Promotes higher development densities so that public transport can be viably provided.

On the positive side, there has never been a better time to seek Government support and funding for transport proposals following the above approach.

Cork Port

Cork's outstanding harbour and the port are among the City-Region's strongest attributes. It is a unique selling point both nationally and internationally, in terms of influencing the development of Cork as a 'Gateway' under the emerging National Spatial Strategy. The importance of partnership with the Port of Cork in implementing the Strategic Plan is emphasised.

The Port of Cork has commissioned a study of port operations and the Port of Cork Strategic Development Study. The Stage Two Report was prepared by Posford Duvivier and issued in September 1999.

The Port of Cork and private facilities in the harbour handled 9.3 million tonnes in 1998, representing a growth of 8.9 per cent on the previous year.
The main commodity throughputs for the port are bulk liquid, dry bulk and break bulk cargoes and Lo-Lo trade. There is also a car trade throughput and a declining volume of passengers and tourist cars.
The Port of Cork handles commercial trade at three main locations - City Quays, Tivoli and Ringaskiddy, with the remainder of the trade passing over private quays, of which the major share flows through Whitegate. Cobh operates solely as a cruise ship terminal and as a fishing port. It has no commercial port operations.

Port operations at City Quays are in decline and are likely to reduce significantly over the coming years. This represents a major City-wide regeneration opportunity. Thus the future focus of activities for the Port of Cork will be at Tivoli and Ringaskiddy.

7:

Development Capacity and Potential

Operations at Tivoli are constrained by the increasing trend towards deeper draught vessels and the constrained area for landside operations; however, the berth does benefit from good railhead access.

Ringaskiddy benefits from deep water berthing, but suffers from a mixture of roles which constrains current operations. The deepwater terminal at Ringaskiddy has recently been extended. However, the capacity of the existing berths is restricted by the seasonality of the cargo and landside operational practices, with working hours particularly affecting bulk cargo handling. The nature of the trade at this terminal has diversified into multi-purpose, with several categories of the traffic now being in shallow draught vessels. Furthermore, customers have progressively developed the landside back-up area behind the berth. This means that the terminal is not suitable currently for use as a container terminal. This will need to be addressed with a view to a long term rationalisation of the multi-purpose operations.

The Port of Cork Strategic Study projects a marked increase in total port throughput from 9.7 million tonnes in 2000 to 17.3 million tonnes in 2020.

In the medium term, the port will need new facilities to accommodate trade growth and to reflect both environmental requirements and restrictions on existing facilities. Even with the recommended improvements to operations at Tivoli container terminal, additional container handling facilities will be required from around 2006. The opportunity for developing deepwater facilities at Ringaskiddy in the lower harbour capable of accepting deep-sea services should be combined with these new facilities. Such a deepwater facility would be able to accommodate the forecast growth in trade and give the potential of attracting deep-sea container ships to Ireland. Much of the land requirements for the protected port development at Ringaskiddy will be from land reclamation. This is likely to be of the order of 30 hectares at both Curlane Bank and Oyster Bank and 10 hectares for a Common User Berth. Despite the proposed reclamation, development in the Ringaskiddy area should be limited to port-related industry, other industry, port back-up or other activities that complement the port.

In the long term the bulk berth at Tivoli will become available for redevelopment following the closure of the Lisheen Mine. The encroachment of Cork City onto Tivoli will make the redevelopment of the berth difficult. Following development of a new container terminal at Ringaskiddy, the container terminal at Tivoli could become redundant. It is likely that redevelopment for port related industry might then be restricted. There may be potential, however, to make use of the adjacent Cork to Dublin railway and bring containers into Tivoli for onward transport by train to the rest of Ireland. Equally, there may be potential in the Marino Point area for the same reason.

Cork Airport

Cork Airport - owned and operated by Aer Rianta - was opened in 1961. In 1999 the airport catered to a total of 1.5 million passengers and over 14,000 metric tonnes of freight. Total aircraft movements in 1998 were over 37,000 of which about 40% are scheduled flights. As the State's third major airport, it currently caters for approximately 8 per cent of passenger movements, 15 per cent of aircraft movements and 7 per cent of freight at Aer Rianta airports.

The airport went to 24-hour operation in 1998 and is currently handling passenger volumes beyond its design capacity. The airport has experienced a sharp increase in passenger volumes in recent years, broadly reflecting the increased demand for air services by the Irish due to economic buoyancy and increase in tourism to the country. Further investment is planned, while an industrial and services park has been developed within the immediate environs of the airport.

An airport development plan has been prepared which will see the airport facilities expanded at a total cost of 77.5 million. The plan includes expansion and upgrading of the airfield area, passenger terminal expansion, new cargo facilities and a multi-storey car park. This development programme of the airport itself can be accommodated within existing airport boundaries. As it will not be necessary to acquire or zone additional land in order to achieve this expansion programme, the key interest for the Cork Area Strategic Plan, therefore, is the role of the airport in supporting the economic potential of the City-Region and enhancing the image of Cork.

Of particular importance for the Study Area is the need to provide an improved air service to international destinations. Here, the future will be determined by the ownership and operation of the airport. There are two alternatives, both of which imply greater competition. First, to increase access to the airport by airlines other than Aer Lingus, which will open up direct routes to key European destinations at times which are attractive to the business community. Second, and alternatively, current services to Dublin, which acts as the international hub for Ireland, could be upgraded to a much more frequent shuttle service so that business passengers can more easily access overseas destinations at convenient times. The key issue is one of improved flexibility in travelling times for business purposes.

7.5 Utilities

Water and Drainage

Practically all of the water requirements for Metropolitan Cork, including the City itself, are dependent on the works at Inniscarra, which has only limited spare capacity in the short term and will need to be upgraded. Similarly, future sewage treatment is dependent on the scheme at Carrigrennan, Little Island being expanded beyond what is currently planned for, and the Lower Harbour Scheme which is currently at the initial planning stage. These three schemes will be critical to the success of any development strategy, and will require to be progressed urgently.

Cork County Council and Cork City Council are currently preparing to undertake a "Strategic Plan for Water Supply". This plan will enable integration of the water supply to Cork City and surrounding county areas, and make provision for servicing the requirements and phasing of the Strategic Plan.
A Strategic Plan for Foul Sewage and Surface Water Drainage could also be desirable to assess the integration of sewage and drainage for development areas adjacent and close to the City boundaries.
It is important to emphasise that studies and action plans should be undertaken as a matter of urgency so as to ensure that the required services infrastructure is provided on programme with the Strategic Development Plan, regardless of whether this is funded all or in part by the public or private sector.

Waste Management

The residents and industrial and commercial uses in the study area generate a large volume of solid waste, and it is of great importance to the quality of the environment that it is managed in a sustainable manner. Both the City and County Council have adopted waste management plans based upon European Union and Irish legislation and policy, and these set out strategies and performance targets. Among the key policies of the plans are an increased emphasis upon recycling of municipal, construction and demolition waste, a reduction in the amount of waste going to landfill, rationalisation of the number

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of landfill sites, and reduced emissions of methane gases from landfill. The development of composting and other biological treatment facilities are also proposed. Further details of these waste management strategies are given in the appropriate waste management strategies for each authority.

Electricity
The Plan recognizes that the delivery of power and the provision of the necessary infrastructure is an essential requirement for the economic development of the Study Area.

In Cork growth rates in electrical demand have been above the national average of 5% per annum for the last eight years. There has not been a corresponding investment in transmission infrastructure to support this demand. The critical problem locally is security of supply – owing to a infrastructure deficit there may be problems maintaining service. This acts as a deterrent to certain industries as a consistent supply cannot be guaranteed in Metropolitan Cork. This problem would be overcome by a 220kV link between Raffeen 220kV station and Aghada 220kV station, which would also allow other improvements to take place.

Where feasible, consideration should be given to putting infrastructure underground.

Gas
The Natural Gas distribution network now extends out from Cork City to Ballincollig, Tower, Carrigaline, Passage West, Glanmire, the western side of the Lower Harbour, Carrigtwohill, Midleton, Cobh, Little Island, Fermoy, Mitchelstown and Mallow. Bord Gais is actively examining the feasibility of extending the grid to Bandon, Kinsale, and the eastern side of the Lower Harbour, and does not envisage exceptional difficulty in catering for future development in any area that already has a gas supply. On the other hand, the capital costs of providing a supply to villages and remote areas are likely to be uneconomic. On-going liaison with Bord Gais is required as local plans are progressed.

Telecommunications
The availability of competitively priced broadband international connectivity is a fundamental requirement for Cork's future, one which it currently lacks. The following infrastructure is needed:

- A fibre ring backbone network around the City.
- A comprehensive local access network.
- A telehouse/co-location facility, connected to the Global Crossing Network and to CityWest Primary Telehouse, Dublin (or any other transatlantic cables being developed), providing a centralised Internet connection for local businesses and communities.

Cork should also secure equal peering with Dublin for voice and broadband services. Firstly, to prevent service providers charging extra for traffic to/from Cork when communicating with Dublin, and secondly to remove the price differential – the price of voice and broadband services is lower in Dublin than in Cork. Initiatives to progress the above requirements are already in place by Enterprise Ireland (ITS 2007 Strategy) and the EC Business Innovation Centre (BIC) in Cork. (This was established in 1998 by local private and public sector interests with the support of the European Commission). The Cork Area Strategic Plan process will need to actively support, and be coordinated with this initiative. In terms of phasing, the above items are required in the short term and new developments should be linked in as they are constructed.

7.6 Development Potential - The City

Existing Situation
Cork is the historic heart of the Study Area, with a population of 124,000. It has an attractive character, a fine setting and a pleasant environment. It boasts a number of well established industries, notably brewing and distilling, and in recent years the economy has expanded to include a cluster of academic, research, medical and related business activities in the south-west. There are well distributed and diverse industrial zones and a few small business parks, mostly accessible from the main road network but well related to housing areas. There are a number of successful district centres, but there is a lack of major modern office districts, and although some progress has occurred in the suburbs, the sites are isolated and car-reliant. There is also a lack of small dwellings in the housing stock, relative to changing household size. As in many historic cities the narrow streets often appear congested.

The consultation process showed that it is widely accepted that there is a need to improve the appearance of Cork City, and invest in the public realm to make it more attractive. Within this context, Cork City Council is planning significant

improvements for Patrick Street, Grand Parade, the South Mall and Parnell Place. These projects, and future schemes, will require on-going investment.

It is not just the public realm that requires improvement: the fabric of Cork City also needs investment. There are many derelict or under-used buildings which need rehabilitation and reuse to conserve the City's architectural heritage, to revitalise the City and to attract more people to live and work there.

The City has benefited from the construction of the South Ring Road and the Jack Lynch Tunnel, as traffic volumes through the City have fallen. The City Council is planning to take advantage of the spare capacity released to improve conditions for pedestrians, notably on Patrick Street, by introducing more pedestrian crossings and by gradually dismantling the City's one-way systems and reverting to two-way working.

On-street parking in the City Centre impedes movements for buses, pedestrians, cyclists, as well as other traffic. However, many buildings, particularly private houses, do not have off-street parking.

Potential for Development

There are immediate opportunities for the reuse and redevelopment of buildings and vacant sites within the Island, and the surrounding areas.

In the longer term, reduction in use of the City Docks would open up the opportunity for the development of a major new business district and high density housing area in the City. This could be linked via a new river bridge to the City centre and Kent station. The station is currently isolated and somewhat removed from the retail core and also from the bus station. There are plans to redevelop the station in partnership with a private developer and the opportunity exists to create a rail-bus interchange at the station.

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For this approach to succeed it will require re-development of the eastern edge of the City centre, as a link between the Island and the Kent Station/docks area. The environment of this area is quite poor, but there are numerous fine historic buildings, historic urban structure, and good townscape, including river frontages and interesting topography and vistas. These offer unrealised opportunities to conserve and animate historic areas by conservation, re-use and infill.

There is an opportunity to re-balance the City by stressing development to the north. This would be complemented by provision of a North West Link Road. The intersection of this potential North West Link Road and the railway could enhance the potential of Kilbarry and create a major new development node. Preliminary options for such a road are currently being considered by the City Council.

There are a number of opportunities to resolve social and physical difficulties in Cork City and create a thriving vibrant city. However unless development opportunities are grasped, there will be a decline of the centre, driven by investment in suburban locations, encouraged by their accessibility and failure to assemble and deliver land and buildings for investment in the centre.
Increasing traffic congestion in the centre and also inner/middle suburban areas, could lead to poor environmental conditions, declining accessibility and reduced mobility. These conditions will encourage more people to live in the outer suburbs and Ring Towns. Furthermore, increased pressure for suburban development will lead to erosion of the green edges of the City and to urban sprawl.

7.7 Development Potential - Metropolitan Cork

An analysis of the development potential of the area to be known as Metropolitan Cork was carried out. The results of this are summarised below.

Ballincollig
Existing Situation
Ballincollig is a modern, rapidly growing, low density town immediately west of the City. Together with surrounding villages, it has a population of over 20,000. It is bounded on the north by the River Lee, a protected area, and a steep hillside beyond, and separated from the City by a Green Belt at Bishopstown.

Potential for Development
The redundant barracks in the town centre will come on-stream for mixed-use development within the Plan period, and represents a major opportunity for the town.

The proposed Ballincollig bypass could release development land to the south of the settlement and also allow the creation of a strengthened local town centre, which is currently undeveloped. The bypass will also connect it to the southern suburbs with their associated facilities. Education, research and science type uses could expand in Ballincollig, incorporating an academic village or science park. The potential North West Link Road is proposed to connect from the Ballincollig by pass at Poulavone northwards, along the eastern edge of the settlement.

The existing main street in Ballincollig forms part of the N22, which connects Cork to Macroom and Kerry. The town centre therefore suffers from traffic delays even in non-peak periods. When the bypass is complete, there will be an opportunity to reallocate road space in the town centre to pedestrians and public transport. With the redevelopment of the Barracks site, this would make a substantial improvement to the town. The bypass will also release capacity on the former road links to the City centre (via Carrigrohane Road or Model Farm Road), giving reasonable scope for the introduction of high quality on-street public transport systems, which is a priority for Ballincollig.

Water supply and sewer capacity are adequate, but an improved surface water disposal control system and a storm water control system are required in the short term.

Conclusions
There is ample opportunity to consolidate Ballincollig's growth within the existing town boundary. This should be utilised in the short term, with development of Ballincollig gradually reducing over time.

Carrigaline & Ringaskiddy
Existing Situation
Carrigaline has grown rapidly in recent years, to a population of about 10,000, reflecting its good access to employment centres at Cork City, Douglas, Ringaskiddy, and the Shanbally industrial zone. It retains a strong separate identity. It has good retail and other services, but these are dispersed around the single main street which suffers from traffic congestion. Ringaskiddy is the centre of port operation and related industries in Cork, as described previously.

Potential for Development
Major expansion of Carrigaline southwards is constrained by steep topography and remoteness, but the proposal for completion of the eastern relief road would round off the town's development in the south and release significant additional development land within the line of the road. The estuary of the Owenboy River and the coastal zone tends to constrain expansion eastwards and the steep sided river valley limits expansion westwards. Development is currently occurring to the north of the town (south of Shannonpark), and there is some scope for more expansion in this area; although this would not help consolidate the town in the same way as development to the south and east. It could also intrude into the Green Belt.

Land supply in Ringaskiddy is becoming scarce. As described previously, the Port's plans for expansion include land reclamation; however, land in the area should generally be reserved for port-related or complementary uses.

Traffic congestion extends beyond Carrigaline town centre into the wider area, and is a particular problem at Ringaskiddy. This will be partially addressed by the NRA/County Council's proposed upgrading of the N28, in addition to the relief route. A detailed local transport plan for Carrigaline/Ringaskiddy is urgently required however.

Existing routes from Carrigaline to the city centre are either via the South Ring Road and South City Link, a high speed but relatively long route, or via Douglas Village, a slow but relatively direct route. Neither route is ideal for high capacity public transport systems, and this is compounded by relatively hilly topography as well as a low density catchment. Nevertheless, public transport links to the City need to be significantly upgraded.

Land north of Carrigaline is within the Green Belt and development here would have an adverse impact and ultimately even merge Carrigaline with the southern suburbs. The sanitary and electrical service supply in the short term presents no major problems. Ringaskiddy has a large spare capacity of electrical supply at lower voltages.

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Conclusions
Major growth of Carrigaline is not desirable and overall it is concluded that the emphasis should be on rounding off the town's development. Growth in the Ringaskiddy area should be limited to port-related activities or industries, or complementary uses. A Local Area Plan is required for the area, which could also embrace Carrigaline.

Cobh, Monkstown and Passage West
Existing Situation
These attractive settlements grew as small nineteenth century port towns in Cork Harbour. Cobh, which has a population of 11,000, is by far the largest and has an architectural ambience and environmental setting of the highest quality. There is much heavy industry in the area, including a steelworks on Haulbowline Island (now closed), a shipyard and a fertiliser plant at Marino Point facing Passage West. Road links are fairly circuitous, but a frequent vehicle ferry links Cobh with Monkstown/Passage West and there is a branch railway line from Cobh to Kent Station.

Potential for Development - Monkstown and Passage West
Sections of the former railway alignment to Passage West and beyond have been converted to a segregated walking and cycling route. This amenity is well used, and is one of the few facilities of its type in Cork. The potential to reinstate a railway along this route is limited for two main reasons. Firstly, the catchment of the railway would be small, so it would not attract enough passengers to justify major investment. Secondly, the level of investment needed would be high because key sections of the alignment are no longer available. At the City end it stops at Atlantic Pond, well short of any currently useful destination in the City. The section from Mahon Point to Rochestown / Passage is also incomplete. On this basis, it is not suitable as a strategic transport link. At a local level, its role as a "Green Route" is important. As part of the Docks redevelopment, and the proposed Mahon Point development, it would be worth considering if the mini buses, or even ultra light trams, could be viably and feasibly introduced on the Green Route, sharing with pedestrians and cyclists.

Potential for Development - Cobh
Land is available north of Cobh in a valley, which could be linked to the railway. The water supply would be adequate (on the basis of schemes in progress) and sewerage would be provided by the Lower Harbour main drainage scheme currently in design.

Minor investment in additional 38kV electrical infrastructure would be needed to accommodate industrial and commercial development.

In the event that the present industry installations at Haulbowline Island, Rushbrooke and Marino Point were to close – which is a possibility over the Plan's time horizon, then major medium to high density mixed-use redevelopment, (perhaps including high quality workplaces, apartments and cultural projects) could be pursued.

Conclusions
It is concluded that moderate growth in and around Cobh could be environmentally acceptable, economic on infrastructure, & well served by public transport. However, the centres of Monkstown and Passage West lie on narrow, heavily trafficked roads which cannot be bypassed, and the generally steep hillsides and townscape and landscape quality constrain future expansion.

Midleton - Carrigtwohill
Existing Situation
Midleton is a substantial and self-contained historic town of 9,000 inhabitants with an identity wholly distinct from that of Cork. The distillery is a significant tourist attraction, as are the local Ballymaloe Cookery School and hotel and the nearby coast. Carrigtwohill, with a population of over 6,000, is smaller and less self-contained than Midleton, but is closer to Cork and has proved itself able to attract employment on well located industrial estates.
The towns are both surrounded by pleasant landscape and areas of nature conservation importance.

Potential for Development
The two settlements lie along a potential multi-modal corridor leading from Cork to Waterford and Rosslare via the N25 and the former railway line to Youghal. Major expansion at Midleton is dependent upon the provision of a new local road system to relieve the centre, new sanitary infrastructure, and diversion of commuter traffic on to the railway. Carrigtwohill has considerable amounts of good building land to the north and west and access to the former railway. The potential to develop a multi-modal transport corridor, with good land supply and proximity to Cork should be attractive to local and inward investing businesses.

Additional infrastructure costs for short term development would be low because schemes are already committed, although the sewage treatment plant would have to be upgraded. In the long term, infrastructure would be needed to extend the trunk water main and new reservoirs, extend the existing Midleton sewage treatment plant, and provide a new surface water disposal system and groundwater protection measures. This could be economic if major development were proposed.

The electrical requirements for Midleton town could be catered for by a new 110/MV development on the existing station at Midleton. This station will require a second 110kV line to provide a secure supply for Midleton. Midleton hinterland will also take supply from the new Midleton 110kV/MV station. The hinterland will benefit significantly from the security provided by the second 110kV line to Midleton.

The IDA Industrial Estate in Carrigtwohill is serviced from an existing 38kV Station. As a 110kV line crosses the site, a looped 110kV/MV station could be built that would provide for major expansion at this location. This station would also cater for major development at Glounthaune.

Conclusions
Large-scale development could be accommodated in the area which, in the early phases, should concentrate at Carrigtwohill.

Glanmire Area
Existing Situation
Glanmire, Riverstown and Sallybrook lie in the valley of River Glashaboy, forming a single linear settlement. Although they have been expanded recently, their character is enriched by the original, historic hamlets and the complex topography of the area.

The area generally has good road access to the main road network. The existing Cobh/Cork railway lies at the southern edge of the area, with stations at Glounthaune and Little Island. Little Island itself is a major, and growing employment area.

Potential for Development
There is little future growth potential in the centre of the area without threatening the landscape. The land north of Glounthaune together with Little Island might have some potential as rail-commuter settlements via a bus feeder service and a Park and Ride facility.

Conclusions
Whilst short term services are available on Little Island, development at Glounthaune would require a new reservoir at Glashaboy and water supply extension and a sewer connecting to the treatment plant at Carrigrennan.

Ballyvolane
Existing Situation
To the east and south-east of Ballyvolane lies the Glashaboy River valley, with steep slopes and mature landscape. To the north, the land is relatively flat but is in the Green Belt, although most of the landscape is not of the highest quality. Access to the railway is poor, and this would need to be overcome by good feeder bus services.

Potential for Development
Although the alignment of the proposed North West Link Road is yet to be finalised, it is likely to enclose an area of undeveloped land suitable for housing. The provision of infrastructure for this land could be economic. Water supply and sewer capacity is already adequate, but surface water disposal works would be needed. Development at Ballyvolane can be serviced from the additional 110/MV capacity at Kilbarry.

Conclusions
It is concluded that development beyond the proposed North West Link Road would not support public transport objectives. A moderate scale of development within the line of the proposed North West Link Road could be planned in conjunction with the road design and planning process, with suitable densities.

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Blarney Area

Existing Situation

Blarney is a small historic town with a notable tourist industry based on the well-known castle, and Blarney Woollen Mills. The town is surrounded by a number of sizeable settlements such as Tower, which are popular residential locations giving a total population for the whole area of over 16,000.

Potential for Development

The combined advantages of the area's proximity to the City, in particular its proximity to the northern part of the City which needs regeneration and housing, and its excellent transport infrastructure, make the area between Blarney and the City highly attractive for development.

The topography of the area is complex and generally well wooded and the small and circuitous rivers are environmentally sensitive. Main road access is from the nearby N20 Mallow – Limerick road, and the former Blarney station lies 1km north-east of the town, on the Mallow-Cork main line. There is also a disused siding at Rathpeacon, with sufficient land for parking, and a crossover so that commuter trains could terminate and reverse.

The Rathpeacon area lies within the Green Belt, but appears to be developing rapidly, partly as the result of permissions being granted for single dwellings on large plots. If the boundaries of the Green Belt were to be altered, then the area, particularly to the north around Monard, Rathpeacon and Kilcully, offers development opportunities based upon the railway and proposed North West Link Road.

Only a small part of this area would be available in the short term; this would require a water supply extension from the City or Blarney town, and foul and storm sewer connections. Long term development would require a water supply trunk main extension from Inniscarra plus new reservoir and a new effluent treatment plant. In addition, storm water drainage will need to be provided and this may be limited by the capacity of the existing watercouses discharging from the area.

There is a 110kV line approximately 3km north of Blarney at Waterloo. Development in Blarney would bring forward the need for 220kV infrastructure west of Blarney.

Conclusions

For strategic reasons, the area between the City and Blarney, along the railway line is amongst the most attractive areas in the Study Area for development. The cost of development and supply of infrastructure would be relatively high and consequently high densities would be required.

7.8 Development Potential - The Ring Towns

Mallow

Existing Situation

Mallow has a prosperous economy and good national and regional access by both road and rail, and it lies on the potential Galway – Limerick - Cork growth axis. The current population is estimated to be 10,000, and the town possesses a comprehensive range of retail, educational, health and sporting facilities, serving a wide catchment area.

Potential for Development

The town is divided into four quadrants by the Blackwater River, the N20 to Limerick and railway, so that it has a rather dispersed character. There is a plentiful supply of building land to the north and south, but development to the east and west is constrained by the Blackwater Valley.

Substantial areas of land are considered serviceable in the short term east of the railway. In the long term, additional land can be served by the construction of a new reservoir, a new trunk main and sewerage treatment plant and surface water trunk sewer.

There is an existing 110kV station in Mallow town, and 110kV/MV capacity could be installed to cater for industrial and residential development in the north relatively easily.

Mallow's potential could be further improved by diverting the N72 from Oliver's Crossroads, north of the town, to meet the N20, thus relieving the town centre and accessing new development. A new railway station could lie at the centre of such a development, and a similar situation could be created to the south, thus balancing expansion north and south.

Conclusions
Mallow has excellent development potential and, even in the short term, could accommodate major growth.

Fermoy
Existing Situation
Fermoy is an attractive, historic town of over 6,000 inhabitants with good services and a proven ability to attract modern industry. It is strategically located on the Cork-Dublin road (N8) and when the proposed bypass is built, the relief to the centre should allow many town improvements and also improve primary access to development land, particularly to the north. Reliance on a single bridge, however, limits internal north-south circulation, and there is a danger that the bypass could encourage retail and service location at or near the junctions with the old road, and undermine the historic centre.

Potential for Development
The Blackwater Valley, an area of scenic importance, constrains the development of the town east and west, and to both south–west and south-east development growth is constrained by steep hillsides. To the north, the valley of the River Funshion may be regarded as a constraining factor.

The new water supply scheme, currently undergoing construction, and the upgrading of the sewage plant already committed, will be adequate to cater for growth in the short term. In the long term, the opening of new development areas will require a new reservoir to the north, a new (or expanded) water source and sewerage treatment plant, and a surface water disposal system.

Additional electrical infrastructure will be required to support development, including a second 110kV line.

Conclusions
It is concluded that Fermoy could receive moderate growth without excessive environmental impact once the bypass is opened. Some commuting to Cork City is inevitable, and an upgraded bus service should be introduced to offer an alternative to the car. A Park and Ride site on the N8 on the City fringe would also be advisable.

Youghal
Existing Situation
Youghal, which has a population of over 7,000 inhabitants, is a local service and tourist centre that has attracted a number of high-tech firms. It is a very fine historical town situated within a beautiful landscape setting, much of which is also of ecological importance.

Potential for Development
The N25 between Rosslare and Cork currently passes through the town causing congestion and a poor environment. A proposed new bypass will remove much of the traffic congestion and allow urban renewal. The bypass will also open up extensive new areas for development, which can be readily serviced through a water supply project and a new sewerage treatment plant which are already at planning stage. However, there are quite steep hillsides separating the historic centre from the new areas and housing will need to be well linked to the centre, otherwise the growth of new retail developments will be encouraged along the new bypass, thus undermining the role of the centre.

Future development in Youghal will require the provision of additional electrical infrastructure. This will be a looped 110kV/MV station which will require two 110kV lines. Re-opening the rail line to Cork would considerably strengthen the attraction of the town.

Macroom
Existing Situation
Macroom is a market town with an estimated population of 3,000 people. The main employer in the town until recently was the General Instrument factory at Hartnetts Cross, which had a workforce of nearly 600. The town is particularly attractive, with a fine townscape, very good facilities for its size, and a beautiful landscape setting. The town has reasonably good access from south west, north west and west Cork, providing it with a large rural hinterland stretching well beyond the boundaries of the Cork Area Strategic Plan. The hinterland includes the Gaeltacht area, giving Macroom a unique and special cultural heritage among the study's Ring Towns.

Potential for Development
Topographic and environmental constraints mean that the creation of a compact, spatially balanced town structure will require exceptionally careful planning and urban design. To the east is a sensitive and beautiful valley, including the wide waters of the River Lee, which is dammed for water supply at Inniscarra. To the south, the steep hillside provides an unspoilt landscape setting for the town and beyond is the extremely sensitive environmental area of The Gearagh. The main route to Kerry (N22) passes through the centre of Macroom. The NRA and Cork County Council propose to promote a bypass that would benefit the town and are now considering possible options. An interim local traffic management plan and development of off-street car parking would be beneficial.

Population growth in Macroom will require investment in water and sanitation infrastructure in the short term. The expansion of Macroom will necessitate wise use of building land and higher densities than in other comparable settlements, due to the topographical restrictions and in order to maintain the attractive architectural character of the town.

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Northwards expansion is dependent upon the line of the proposed bypass and could be costly to service. Electricity supply will be good after completion of the upgrading of the existing 38kV sub station to 110kV/mV.

Macroom is suggested as a focus for industrial development in the North and West Cork Strategic Plan. This Study has a rural development brief. Because of Macroom's strategic location in relation to some of the County's most vulnerable rural areas, the town is considered to merit special attention, investment and promotion.

Conclusions
Growth and development of Macroom is particularly important in the context of its pivotal point between the rural areas of North and West Cork. Nevertheless any growth will need to be carefully planned given local environmental constraints, cultural heritage and the cost of supplying services, and will need to be well integrated with plans for the proposed bypass.

Kinsale
Existing Situation
Kinsale is an historic town of 5,000 people overlooking a fine natural harbour and set within a landscape of outstanding beauty. The town's success is due to an expanding tourist industry and a large pharmaceutical plant at nearby Dunderrow. The town is well connected to Cork and Bandon by regional roads, but the narrow medieval streets are easily blocked by traffic and on-street parking can cause congestion.

In keeping with its role as a tourist centre, Kinsale needs an improved pedestrian environment, which may require stringent traffic management measures during the tourist season.

Potential for Development
Expansion of the town – except for infill, would be heavily constrained by environmental and topographical consideration and water supply. Furthermore, major expansion would further congest the centre and might undermine the attractiveness of the existing urban quality.

Further development in Kinsale would require the provision of a looped 110kV/MV station and two 110kV lines.

Conclusions
The growth of Kinsale will be constrained by environmental and topographical constraints and limited water supplies. Local traffic management is required. The coast zone should be protected and managed.

Bandon
Existing Situation
Bandon's current population is estimated to be nearly 5,000, having grown rapidly in recent years after many decades of decline. The food industry is an important source of employment in the town, but there has also been a growth in pharmaceuticals and electronic industries. Bandon is a town of architectural importance and character and has an attractive landscape setting.

Bandon's situation on the N71 to Skibbereen and Bantry causes problems with the conflict between through traffic and local traffic. The Southern Relief road scheme, which was completed in January 2002, will relieve the town of Skibbereen traffic. However, this road does not serve traffic to and from the Bantry direction which travels through the town over the only bridge, with significant impact. A possible option may be to link the Southern Relief Road to the Bantry Road some distance to the west of the town, providing a western relief route.

Potential for Development
Land immediately north and south of the town rises quite gently, providing some development opportunities. The relief road provides access to development land to the south. Significant development of land to the north is dependent upon provision of a second river crossing. The Bandon River represents a major environmental restraint to expansion in the valley to the west and the north-east.

Minor short term development on the south could be accomplished by upgrading the existing sewer network and building new storm-water sewers. Expansion northwards would require a new reservoir north of the town plus extension of the sewerage treatment plant. ESB is installing 110kV/MV capacity at the existing station, located to the north of the town, which will create spare capacity for development.

Conclusions
Careful planning, particularly at Kilbrogan on the north, coupled with a sensitively located and designed river crossing could overcome environmental constraints and permit significant expansion in addition to the town's natural growth and regeneration.

7.9 Development Potential - The Rural Areas

The Study Area contains over 75 villages as defined in the County Development Plan, ranging in size from large, historic settlements such as Innishannon, to concentrations of a few houses. The majority of settlements possess basic community facilities, such

as a shop, a pub, playing fields and a community hall, and over 80 per cent have a primary school. However, few villages are connected to mains sewerage systems. Water supplies to villages are generally available, although often at a high cost.

Many villages possess buildings and streetscapes of architectural, historic or visual interest and a large number are located in areas of scenic beauty or near areas of nature conservation interest.

Two strong trends are having a profound effect upon the viability and character of the rural hinterland of the Study Area. The first is the steady and inexorable decline of employment in the agricultural and forestry sector. Forecasts by ESRI suggest that employment in this sector will continue to fall by over 2 per cent p.a. for the next 15 years, having fallen by nearly 3 per cent in the period 1995-2000. This decline is despite efforts by the Government to encourage investment in alternative forms of rural employment, as evidenced by the extensive commercial forestry planting carried out in the upland parts of the Study Area in recent years.

The second trend is development of commuter housing in the rural areas, particularly in the form of the construction of individual dwellings in open countryside. This is believed to be, in part, a response to a shortage of suitable or affordable dwellings in urban areas. It has also led to a population increase in many of the rural areas and high levels of affluence as shown previously in Figure 7.3. However, the quantity of such developments in the overall context gives serious cause for concern. The County Council received applications for some 2,300 one-off dwellings in the countryside in the year 2000 alone. This level of one-off development is not sustainable and will lead to significant increased costs to the community for the provision of the necessary infrastructure and local health services in the future. In addition, most such developments rely on a locally based water supply and septic tank based wastewater systems. The issue of an acceptable standard of water supply and containment of ground water and aquifers will present a major and expensive challenge for communities in the future unless the current level of one-off development is seriously curtailed and limited to local inhabitants.

These trends need to be considered in the context of national objectives. It is Government policy to create more sustainable development patterns, including the need to minimise the loss of agricultural land to urban development, reduce the per capita cost of providing new infrastructure services, and reduce the use of cars through the provision of better public transport. The achievement of this policy will require an overall rise in housing densities and for development to be concentrated rather than widely dispersed. Closely linked to and supportive of this approach is the emphasis upon restricting development in the countryside in order to protect attractive rural landscapes, areas of nature conservation interest and cultural heritage and the coastal zone.

Clearly, there is a need for some rural development in connection with agriculture, forestry and other rural businesses; there are also essential rural accommodation needs in the locality.

The concentration of such development in existing villages and towns would promote the viability of communities and villages and be more amenable to the provision of economic infrastructure support.

In a large number of villages, land has been allocated in the County Development Plan for either new housing or agriculture with options for low density housing. In other instances, the development boundary of the village has been defined, but zoning is subject to the provision of adequate sanitary services. While it is not possible to calculate precisely the total number of new dwellings that could be developed within these broad allocations, it is estimated that they are well in excess of the demand likely to be generated by local employment opportunities.

SUPPORTING ANALYSIS

B

8: Alternative Spatial Development Strategies

8.1 Approach

This chapter describes the three alternative strategies that were evaluated as part of the process of generating a preferred strategy. Each strategy was developed as a realistic response to the planning issues and takes into account existing commitments in terms of planning consents and the availability of serviced land. They were formed by creating a coherent set of policy options that were not only compatible with each other but were also mutually reinforcing so as to release synergies. In concept, each of the strategies was capable of implementation and none was extreme. When the strategies were quantified significant differences were created to assist in mathematical modelling of transport. It is normal to do this in such testing, since exploratory hypotheses which are too similar do not reveal clear lessons or insights. Then a preferred strategy was created by synthesis and tested.

Each alternative is described below in Section 8.2, and illustrated separately for each alternative on Figures 8.1. - 8.3. The spatial and transport implications of each strategy are discussed in Section 8.3, and an overall evaluation of the alternatives is given in Section 8.4.

8:

Alternative Spatial Development Strategies

8.2 The Alternative Strategies

Strategy A

The main themes of this strategy is an emphasis upon the importance of market-led growth and maximising the potential of Cork City. Growth would be biased towards the southern part of the Study Area.

The major existing economic generators would be fully exploited, and established market preferences would be largely respected. The strategy recognises the value of agglomeration, clustering and large labour markets in the generation of inward investment.

The larger part of development would be focused in the southern arc from Ballincollig in the west to Carrigaline and Cobh in the south and east. Existing education and research facilities would be exploited to create a 'Science City' at Ballincollig, and linked to growth at the airport and port. Housing at Ballincollig and Carrigaline would be greatly expanded. Growth to the north of the City would also be quite substantial. There would be substantial growth in Carrigtwohill following emerging trends but growth at Midleton would be limited.

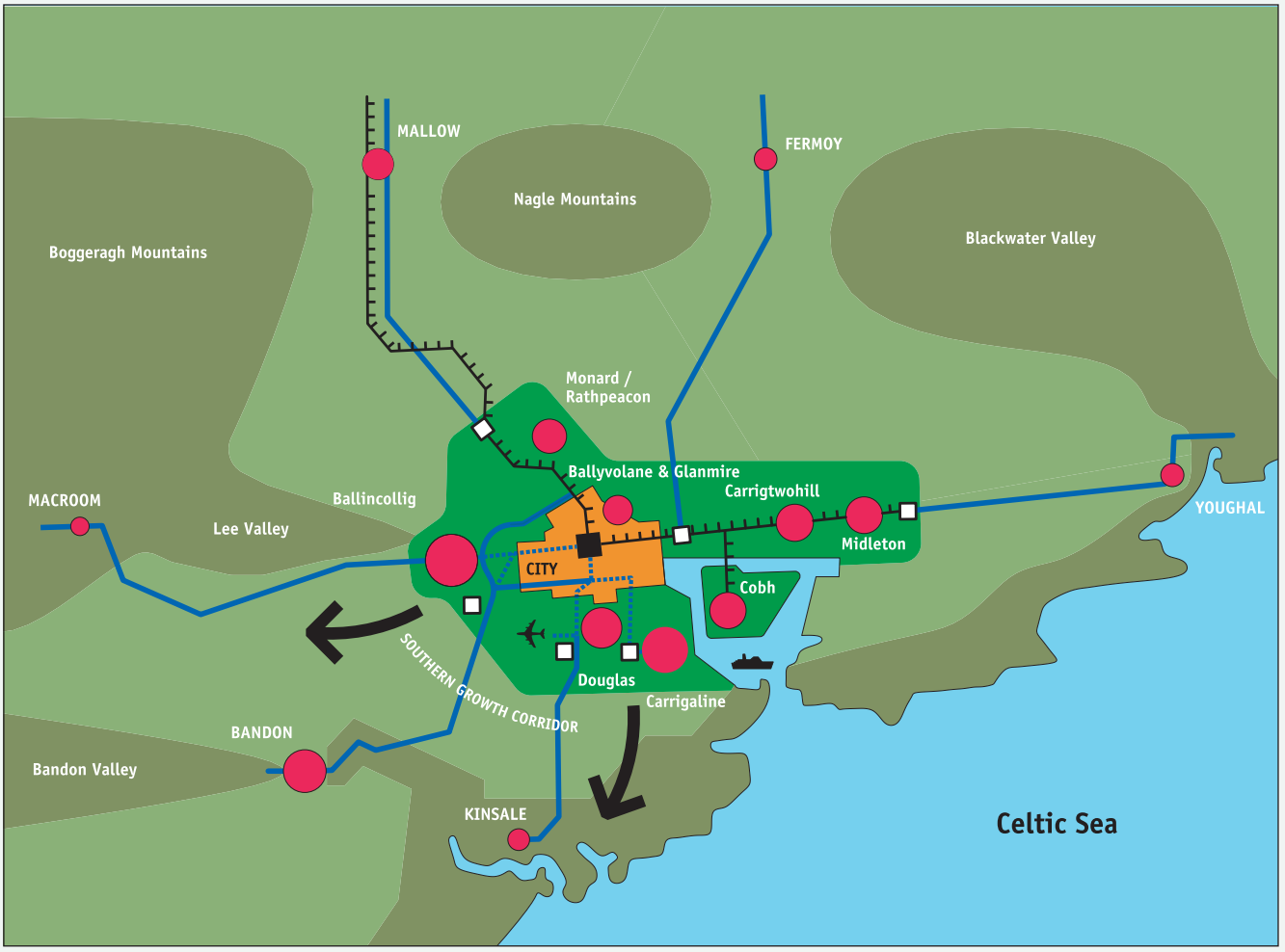
The growth of Ring Towns would be jobs-led. The balance between towns would reflect inherent potential and constraints, but the south-west towns, particularly Bandon, would benefit from the synergy of the southern growth strategy. Rural areas would have low growth targets except for a minor bias to the south-west.

The scope for conservation and urban renewal of the City would be relatively good, with new offices, retail, and higher density housing created in the inner parts of the City and in suburban centres.

The main public transport emphasis would be on-street running systems to integrate the southern growth corridor, and to link it to the City centre. Rail improvements of a relatively modest type would bring significant benefits to northern expansion areas. 'Green Routes', or quality bus corridors and bus feeders to prime routes would be stressed, as would strategic Park and Ride interchanges.

Public transport systems would improve access to opportunities, but opportunities will not specifically be delivered within the more deprived areas in the northside of the City.

Figure 8.1 **Strategy A**



Legend

- Railway
- Growth Areas
- Quality Bus
- Major Roads
- Park + Ride
- Renewal of City Centre and Kent Station Interchange
- Expansion of Port
- Expansion of Airport
- City Improvement
- Greater Cork Greenbelt: no commuter houses or major employers
- Rural Conservation Zone: Agricultural/Landscape Priority
- Protected or Remote Areas
- Overspill Tendency

This plan is NOT intended to be site specific and indicates possible broad locations for future development.

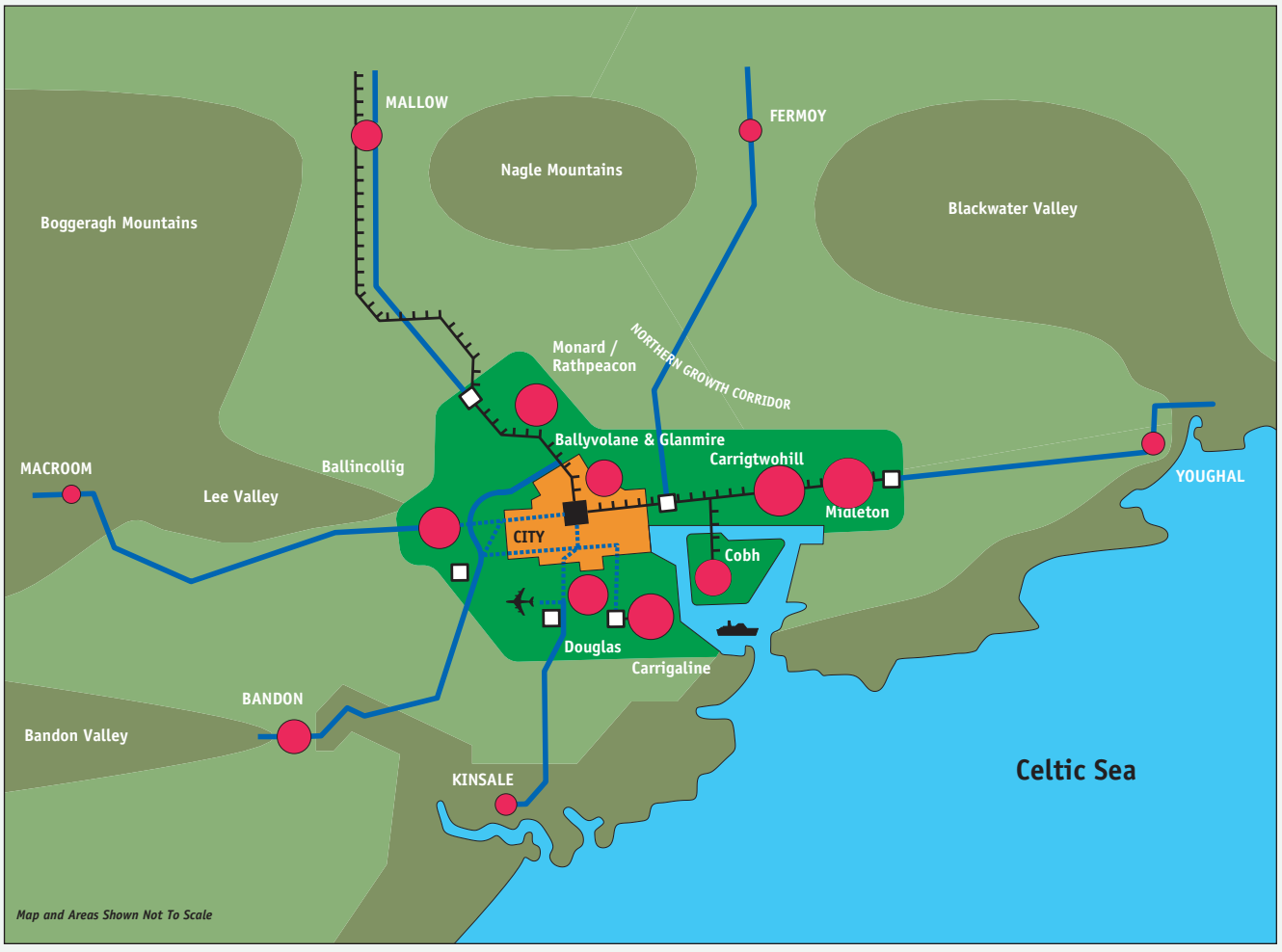
The Green Belt south of the City would be affected and ecological corridors and community identity would be reduced, although the best landscape could be conserved, and settlements kept separate. Housing would be built at higher densities but within generous landscape envelopes. Impact on the coastal zone might be significant.

Strategy B

Strategy B seeks to guide development to those areas most able to accommodate further economic development and best suited to the provision of good public transport. Like Strategy A, it is focused on Metropolitan Cork as the main economic driver for the City-Region and relies on the establishment of a strong public-private partnership and major investment in the local rail network.

Public sector initiatives would be needed to encourage investment in designated areas – mainly to the north, north-west and east of the City, as well as the inner areas of the City. Since most jobs would be located on the north axis and the best public transport would integrate it (via the City centre), with the rest of the City-Region, this would benefit the more disadvantaged parts of the Study Area.

Figure 8.2 **Strategy B**



8: Alternative Spatial Development Strategies

The larger part of development would be focused in the northern arc along the line of the existing and former railway between Blarney and Midleton. At the centre would be strongly regenerated inner areas in the City, with major growth in both jobs and population, and other growth centres at Carrigtwohill and Cobh. Growth would also occur on the west and south sides at Ballincollig, the airport and Carrigaline, but on a smaller scale, aiming to capitalise on the economic potential of the existing education and research institutions, the airport and port.

Growth of the Ring Towns would be jobs-led. Growth would reflect the inherent potential and constraints, so minimal growth in the south-west towns, and a relatively stronger focus on growth at Mallow, Fermoy and Youghal reflecting their accessible locations would be expected.

Rural development policy would, in general, resemble that for Strategy A, with low growth restricted to defined envelopes around key settlements.

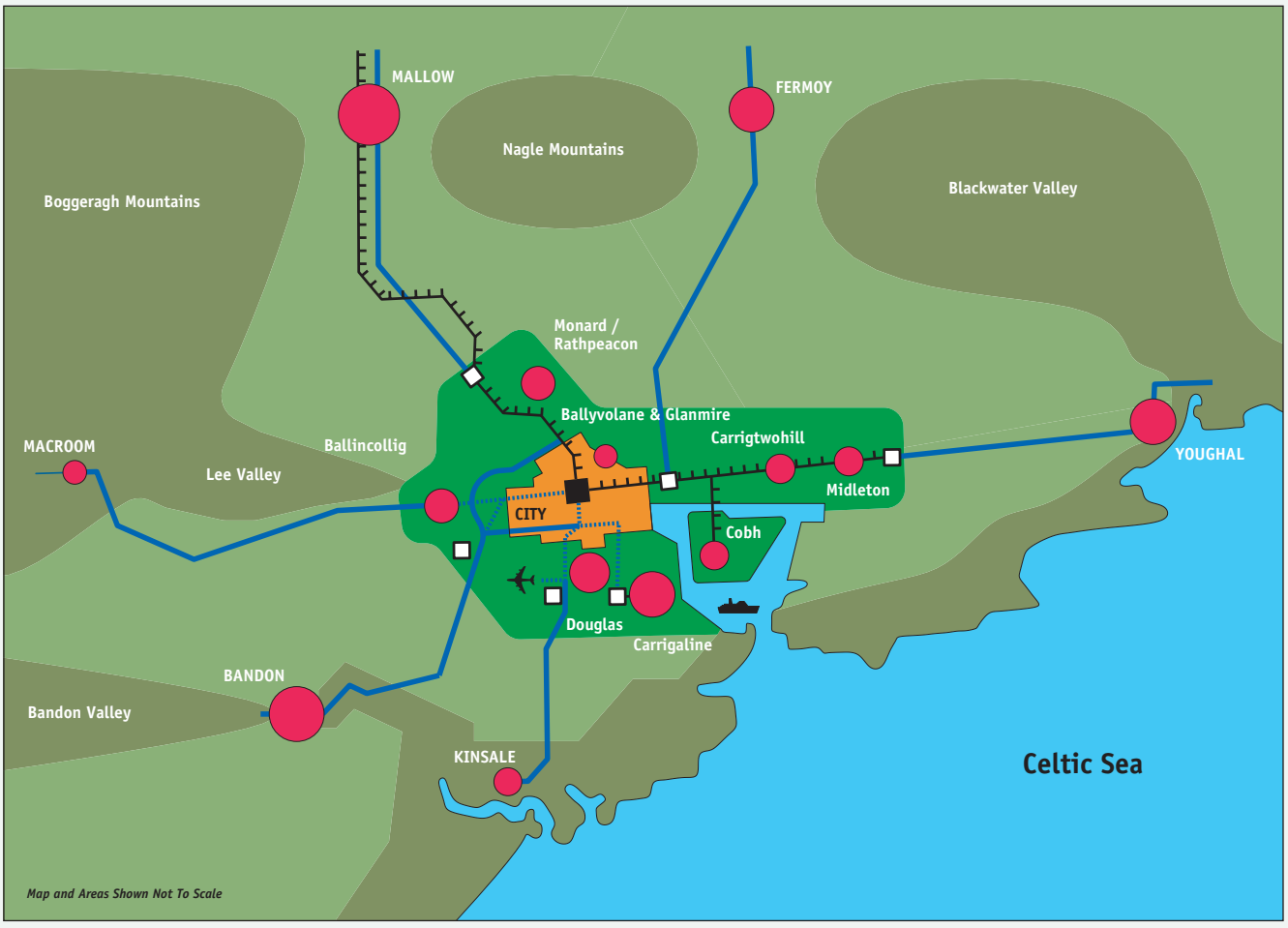
The stress on City regeneration would resemble that for Strategy A, but it would be stronger since the public transport and spatial system would deliver better access for greater numbers of people. Population and jobs would rise faster, and the challenge of land assembly, advance servicing and access, site preparation, marketing and conservation would be correspondingly greater.

The main transport stress would be on an improved rail system connecting existing and new stations, around which development would coalesce. Stations would become vital local centres, and some would have Park and Ride facilities to intercept car travellers and all would have feeder buses. A high quality bus system would connect from the south and west of the City with Park and Ride stations to intercept car users. Green Routes or Quality Bus Corridors would connect suburban nodes to the centre, and strong car restraint measures would be applied in the City.

For the Ring Towns and Rural Areas, the transport strategy would resemble very closely that for Strategy A, although with a greater focus on growth in the corridor of the Mallow-Youghal railway.

A small area of the Green Belt on the northern side of the City would be affected, whereas that on the

Figure 8.3 **Strategy C**



south side would not be. The threat to the coastal zone would be relatively lower.

Strategy C

This strategy focuses on a stronger role for the Ring Towns and the rural areas and a lower rate of growth for Cork City. It anticipates a substantial effort to facilitate and promote major growth in the economies of the Ring Towns, including a significant element of housing-led growth.

The economy of Metropolitan Cork would grow more slowly than that which the other strategies imply. Whilst some clustering would be foreseen on the basis of natural advantage, the creation of large over-specialised clusters in Ring Towns would be difficult and expensive to achieve and might require in-commuting. The lower levels of public transport access to the City might reduce its potential for employment creation, and there would therefore be pressure for much more suburban investment.
A major effort would be made to locate affordable housing to the Ring Towns so as to avoid their concentration in the City, although this would be constrained by the lack of public transport, a more restricted range of job opportunities, and more limited support systems.

Legend

Development would be on a smaller scale than that implied by the other alternatives and it would be more evenly distributed around the urban fringe. The greater growth of suburban centres would be expected due to better car accessibility and availability of parking space.

All Ring Towns would grow more than with the other strategies, with Bandon the main focus in the south-west sector and Mallow the main northern focus, with Fermoy and Youghal also growing strongly.

Rural hinterland populations would grow more than under Strategies A and B, but would still be concentrated, in principle, into the envelopes of key settlements. The majority would live in expanded villages or small towns on or near major movement arteries between the City and the towns, including around re-opened rail stations.

Urban renewal would concentrate more on housing – particularly of high quality – and also on speciality services, leisure and culture, and less on office employment. Increased car use and relatively poorer public transport might entail less commercial potential than under the other strategies.

Dispersal of development would reduce the feasibility of major public transport improvements and increase car use. As the dispersed population would be more inclined to use cars, so car access to the City centre area would be more important than that implied by the other strategies, although commuting to the City would reduce, relieving some of the stress on the road network.

Inter-town and rural public transport or quasi-public transport (such as employers' buses, taxis, communal taxis and minibuses, and car sharing) would increasingly be required, as they would for Strategies A and B, to a lesser extent. As the towns would still be relatively small they would not sustain other public transport.

The wide dispersal of development would tend to reduce the localised intensity of environmental impact, although the cost of infrastructural and ameliorative measures would be expected to rise. However, the reduction of isolation and increase in vehicular traffic could spoil the character of the countryside.

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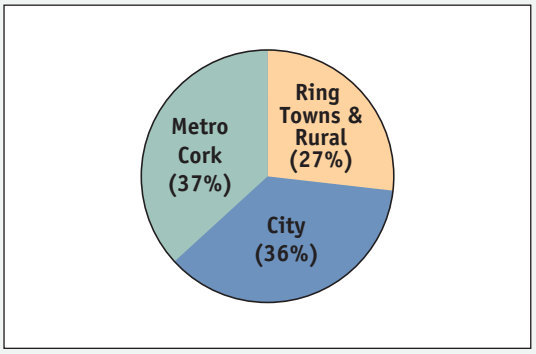
Alternative Spatial Development Strategies

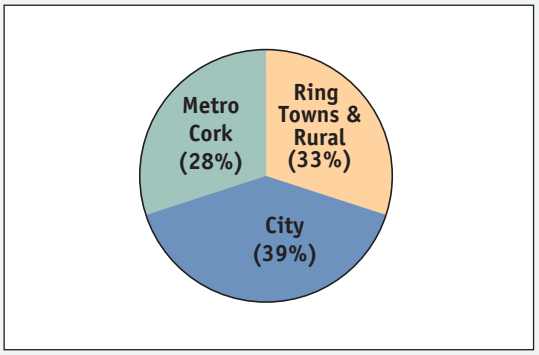
Figure 8.4 **Distribution of New Households and Jobs in Alternative Strategies**

Households

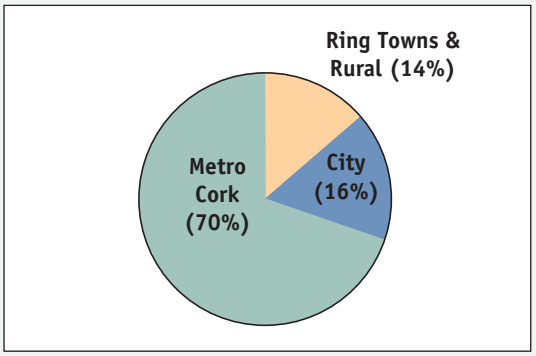
Jobs

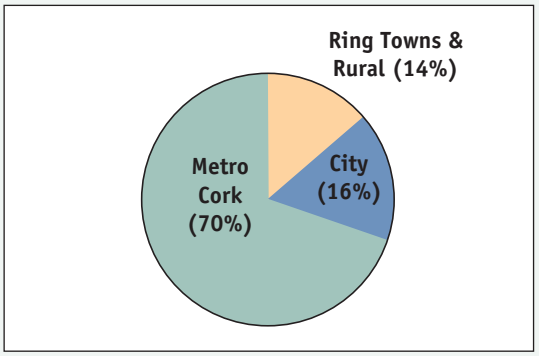
Existing



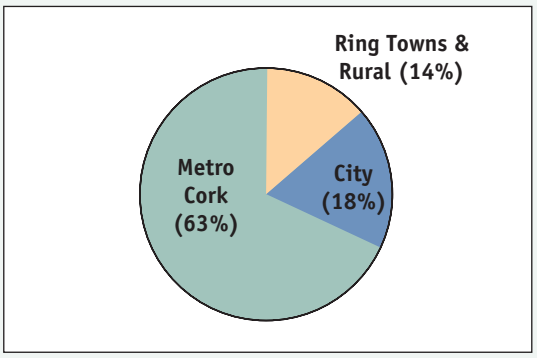


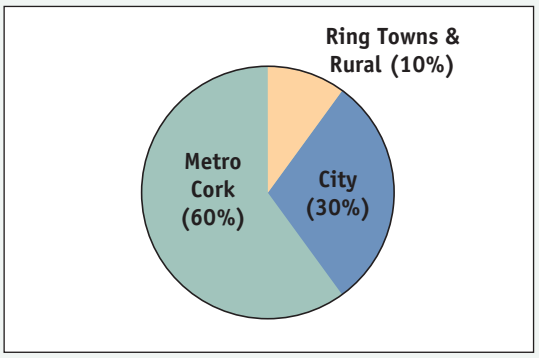
Strategy A - 2020



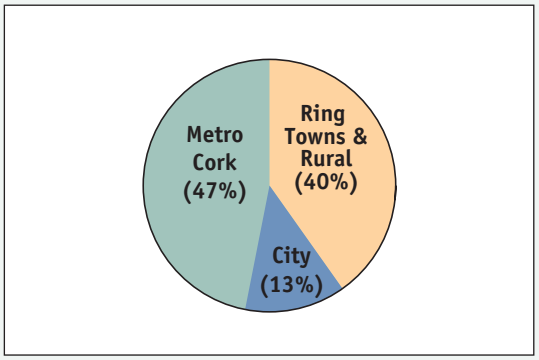


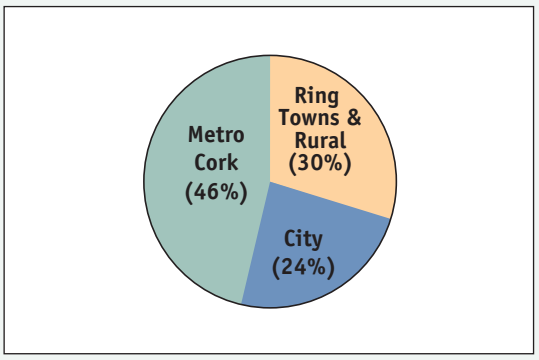
Strategy B - 2020





Strategy C - 2020





8.3 The Spatial Distribution of the Alternative Strategies

All three alternative strategies show that the bulk of population growth will take place outside the City, with the greatest increase in all alternatives occurring in Metropolitan Cork. However, in Alternative Strategy C, growth in the Ring Towns and rural areas would be almost as significant. This is shown clearly on Figure 8.4. For comparison purposes, the existing distribution of population within the Study Area is also shown.

8.4 Transport Assessment

The transport implications of the alternative strategies were evaluated by using a strategic transport assessment model. The model calculated travel demand arising from the continued growth of Cork and its surrounding area, and how demand varies depending on how that growth is spatially arranged. The model took account of rising car ownership and changing travel patterns, and was based on the development of a gravity generation and distribution model to predict travel demand.

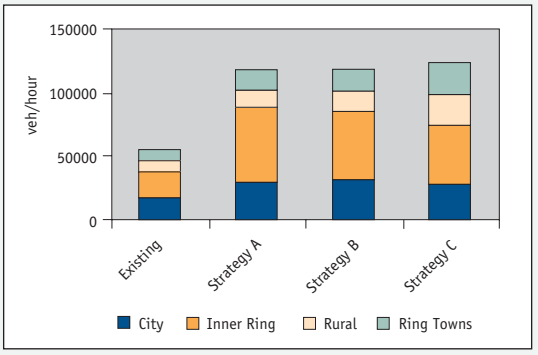
The assessment is briefly summarised below in terms of overall traffic growth, future traffic speeds and journey times, and road links that will operate over capacity in future. The viability of potential public transport schemes is then addressed.

Future Traffic Conditions

The over-riding conclusion of the transport assessment was that the demand for travel will increase dramatically over the 20 year period of the Cork Area Strategic Plan. Without policy measures and infrastructure improvements to reduce car dependency, more travellers will drive cars rather than walking, cycling, using public transport or car sharing. This, in conjunction with population growth, will result in a doubling in demand for car use in the morning peak hour.

When assessed against the overall growth in travel demand, the differences between the three alternative spatial strategies are small. Strategies A and B have similar demands for travel into and out of the City, while Strategy C generates less travel to or from the City. Strategy C generates substantially more travel in the rural areas and Ring Towns than Strategies A and B. This is illustrated in Figure 8.5 above right.

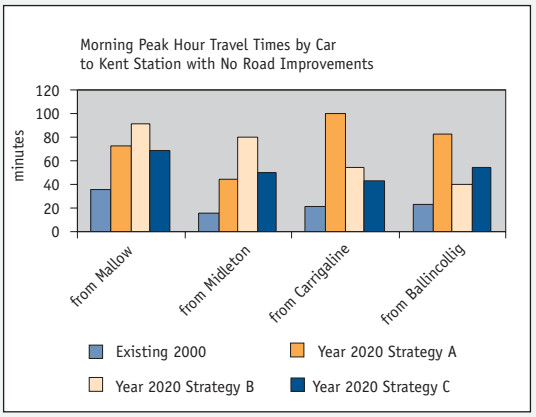
Figure 8.5 **Comparison of Number of Car Trips in the Morning Peak Hour in the Years 2000 and 2020 under Alternative Strategies**



Without any policy or public transport changes, the overall network speed would fall to below half the current speeds, the largest fall being predicted for roads in the suburban and urban areas where speeds fall to around about 5 miles/hour by the year 2020. Conditions would be worst with Strategy A, particularly to the south and west of the City.

It follows that journey times into the City would become much longer by the year 2020. Figure 8.6 below compares average journey times from Mallow, Midleton, Carrigaline and Ballincollig into Kent Station at present (year 2000) with estimated average future journey times in the year 2020 under each of the alternative strategies. In all cases the increase is significant. By far the greatest increases occur in car trips from Carrigaline and Ballincollig under Strategy A, where travel times would become four and five times longer respectively.

Figure 8.6 **Comparison of Car Travel Times at Present (Year 2000) and in the Year 2020**



Public Transport

In accordance with the Cork Area Strategic Plan goals and objectives, all three strategies assumed a high level of public transport provision. Although the need for a fully integrated system is clear, for the purpose of evaluation it has been separated into two schemes. First, a system serving the north and

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Alternative Spatial Development Strategies

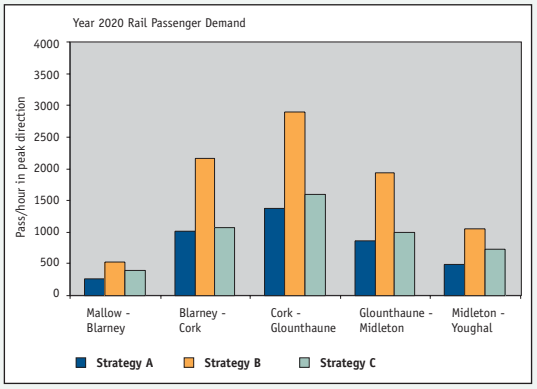
east of the Study Area, based on the existing (albeit partly disused) rail system. Second, a system serving the south and west, running on-street (as large-scale demolition of existing building in the City and suburbs is not proposed).

The analysis of the road network described above showed just how difficult and time-consuming movement by car will become in future. Provision of a public transport alternative is critically important; however, certain levels of patronage are required before public transport becomes viable. Achievement of these levels can be difficult in low-density, dispersed cities and towns. The analysis summarised below provided an overview of future public transport viability for the purpose of evaluating the alternatives and setting the scene for a preferred transport strategy.

Demand for Rail Services in the North and East

Figure 8.7 summarises the forecast morning peak hour flow, in the peak direction, on the rail alignment between Mallow and Youghal. It can be seen that Strategy B generates by far the greatest demand, more than twice that of Strategy A on most route sections. Strategy C generates more demand than Strategy A. All strategies produce over 1,000 passengers/hour in the peak direction between Blarney and Midleton, and Strategy B produces over 2,000 passengers/hour.

Figure 8.7 **Forecast Morning Peak Hour Rail Corridor Passenger Demand**



At the Mallow and Youghal extremities of the proposed rail line, demand falls off substantially and, consequently, these sections may not be viable in the Plan period.

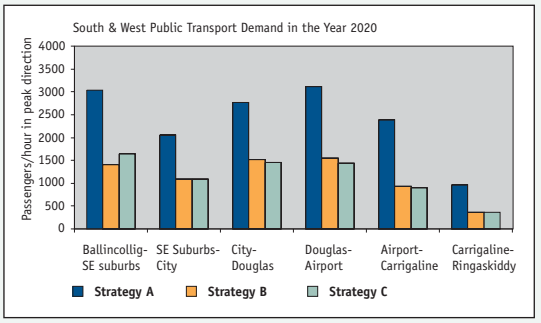
The rail proposals are robust in all three alternative strategies with the high growth scenario in year 2020; however Strategy B would support a far more frequent service, and would best support early investment in the railway.

Demand for Public Transport in the South and West

Demand for public transport in the Ballincollig - City centre - Southern suburbs - Airport - Carrigaline - Harbour corridor was calculated in the same way as demand for the rail corridor described above. This corridor does not have the benefit of an existing railway alignment, and so is starting from a more challenging position in terms of public transport viability. The disused railway line to Passage West and Monkstown has been very successfully developed as a Greenway for pedestrians and cyclists, and this will need to be considered in any proposals for its re-use as a rail link.

Demand for travel in the west-south corridor would be highest with Strategy A. A combination of high overall demand and slow traffic speeds in Strategy A would result in high forecasts for the west and south public transport system, provided that the on-street system can be protected from congestion. As shown in Figure 8.8, Strategy A would generate ample demand to justify investment in for example a very high quality system - possibly a guided busway system (see Appendix I for a discussion on the advantages of light rail, tram and bus-based systems) between Ballincollig and Carrigaline. This would give a very high level of priority, guaranteeing faster travel times than the car, provided that a very high level of car restraint was in place. However, the preliminary analysis indicates that demand would fall a long way short of the threshold required for tram/light rail. On that basis, light rail schemes would not be recommended, even if growth is focused in this area.

Figure 8.8 **Forecast Morning Peak Hour Passenger Demand in the South West**



Strategies B and C would generate less overall demand than Strategy A. There would be little congestion on the road network in the south and west corridor, so car travel would remain attractive. Bus speeds would also remain attractive without radical priority measures. Although there would be insufficient demand to justify a fully guided system with Strategies B and C, a guideway would not be necessary to deliver the same high-frequency, high-quality service. Instead, increased bus frequencies and priority measures would be proposed, with sections of guideway introduced on key links in the long term. The aspiration is for buses in this corridor

to run at least every 10 minutes, regardless of land-use strategy.

Summary of Public Transport Assessment
As described above, Strategy B is the strategy that best supports investment in the railway. By comparison, the situation is not clear in the south and west of the City.

On one hand, Strategy A would generate sufficient demand for substantial investment, but most of this demand arises because travel by car would become very slow. The development of a successful on-street public transport system would involve reallocating space from cars to buses, further increasing car travel times. Selective road widening and road closure to general traffic would also be needed. Some property acquisition may be unavoidable. Detailed studies and consultation would be required to confirm the technical and financial feasibility and public acceptability of this system. The effort in implementing a high priority on-street system should not be under-estimated, but the scope for the incremental introduction of a bus-based system as opposed to an 'all or nothing' tram system is a great advantage.

On the other hand, there will be less overall demand and competition for roadspace with Strategies B or C and it will be possible to provide reliable public transport services with less investment in infrastructure and less draconian car restraint. Overall, Strategies B and C offer better balance and choice in the south and west of the City.

8.5 Evaluation of Alternative Strategies

Each alternative strategy has been evaluated in relation to the project goals (as stated in Chapter 1) and this is summarised in the Goals Achievement Matrix. Appendix J presents the fully completed matrix for each strategy, and this is summarised in Table 8.1 overleaf.

8.6 Conclusions

In choosing between the two dominant Metropolitan Cork options, Strategies A and B, Strategy B was preferred for a number of reasons:

- It promotes social inclusion, particularly as regards access to jobs, city centre services and public transport.
- It has the lesser impact on the Green Belt and better fit within the landscape and nature conservation constraints.
- It best promotes urban regeneration of the inner City.
- The spatial distribution of households and jobs and the rail-based public transport system will lead to somewhat less congestion and less car use.
- It was considered that the economic potential of Strategy B could be easily improved by firm public sector involvement to make the northern axis attractive to investors, and by capitalising upon the unique attractions of the south side in a more selective way.

In comparing Alternative Strategies B and C, there was concern that Strategy B represented too decisive a change to trends since 1996, and that it may be difficult to reverse rural commuter trends to such an extent so quickly. Furthermore, the existing communities in some of the growth areas in Metropolitan Cork may not have the capacity to accept such high levels of growth, particularly in the earlier years of the Plan implementation, whereas the Ring Towns may have the capacity and inclination to accept a higher level of growth.

Strategy C raised a number of challenges. If village development policy did not succeed, then the growth targets could imply continuing suburbanisation of the countryside. Provision of services may be poor, excessively expensive, or uncertain, and this may trap many of the less advantaged, or, alternatively, exacerbate social imbalance in the City.

Furthermore, while it is doubted whether it would be possible to attract sufficient jobs to the Ring Towns, if it were successful, then the extremely high Ring Town job targets would undermine the role of Metropolitan Cork as the economic engine of the region, to the disadvantage of the area as a whole.

The most likely outcome of adopting Strategy C would be that jobs would concentrate in Metropolitan Cork but with substantial housing in the Ring Towns, implying large volumes of car commuting in the absence of good public transport. This situation would make it more difficult to ensure continuing regeneration of the inner areas of the City; encourage investment in the suburbs; and cause the emergence of a 'doughnut city' with a declining, distressed core and large amounts of orbital movement. It was concluded that a balance between Strategies B and C offered the best way forward, with the population target for the Ring Towns and nearby villages set at mid-way between the target of Strategies B and C. This formed the basis for the development of the preferred strategy.

8: Alternative Spatial Development Strategies

Table 8.1 **Goals Achievement Matrix of Alternative Strategies - Summary**

Goals	Policy Objectives	Alternative Strategies A	B	C
(1) Economic growth Create a highly competitive quality location so as to facilitate the growth of an innovative and advanced (but balanced and robust) economy.	01. To promote an innovative, advanced, high value-added and high wage economy	✓✓	✓	✗
	02. To retain a robust, well balanced economic structure	✗	✓✓	✓
	03. To create an internationally oriented and highly competitive location	✓✓	✓	❍
(2) Social inclusion Promote social inclusion (especially within Metropolitan Cork) by improving access to public transport, education and jobs.	04. To create access to employment opportunities for the most disadvantaged members of the community	✗	✓✓	✗
	05. improve access to facilities and services, including education, health, community services and utilities	✓	✓✓	❍
(3) Environment Enhance the environmental quality and landscape setting of the Cork City-Region, and minimise impacts on ecologically sensitive areas and on built heritage and cultural landscapes.	06. To minimise impact on ecologically sensitive areas	✗	✓	✓✓
	07. To minimise impact to cultural heritage, character and setting of the City, towns and villages	✗	✓	✗
	08. To promote the sustainable use of resources, including waste recycling and effective waste management.	✓	✓✓	✗
	09. To minimise the effects on rural landscape character	❍	❍	✗
	010. To ensure ready access to open space and natural landscape	❍	❍	✓
(4) Balanced spatial development Include the City, its satellites, Ring Towns and rural settlements as part of a balanced settlement system with all levels of development in accordance with varying economic potential.	011. To deliver equivalent benefits to the entire area	✗	✓	✓✓
	012. To locate appropriate economic activity in smaller settlements or centres	✓	✓	❍
	013. To avoid excessive routine car commuting	✓	✓✓	❍
	014. To create a dispersed location pattern within Metropolitan Cork	✓	✓	✓✓
(5) Urban renewal Recognise the City as the heart of the City-Region. Promote a high level of economic activity in the city centre and ensure that the housing stock and urban services retain their attractiveness in general balance with the suburbs. Synthesise urban renewal with conservation of historic form and character.	015. To promote the city centre as the major centre for comparison shopping, services and cultural activities in the region	✓	✓✓	❍
	016. To promote regeneration of run-down urban areas	✓	✓✓	❍
	017. To provide high quality public transport to reinforce the role of the city centre	✓	✓✓	✗

Table 8.1 **Goals Achievement Matrix of Alternative Strategies - Summary** (contd.)

Goals	Policy Objectives	Alternative Strategies A	B	C
(6) Transportation Maximise the use of fully accessible public transport by co-ordinating building form, use and density with high quality bus and train services as well as regulating cars and other traffic. Promote walking by improving the pedestrian environment.	018. To ensure the provision of a well functioning, integrated public transport system.	✓	✓✓	❍
	019. To ensure the provision of a defined standard of public transport, at reasonable cost	✓	✓✓	✓
	020. To ensure the timely and cost effective delivery of the accelerated investment in infrastructure.	❍	✓✓	❍
	021. To reduce car dependency	✓	✓✓	✗
(7) Infrastructure Minimise the cost of providing water, sewerage, electricity, gas and telecommunications services to the population.	022. To maximise the use of existing infrastructure	✓	✓	✗
	023. Minimise the cost of new service provision and operation	✓	✓	✗

Key:

✗ = Negative effect

❍ = No measurable achievement

✓ = Slight achievement

✓✓ = Considerable achievement

Appendices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Dwelling	Set of rooms normally occupied by a household "Dwellings" may include vacancies (see below).
Household	Group of people sharing a common budget.
Housing completions	The number of new houses completed in any period, together with conversions from non-residential to residential use.
Housing stock	Total number of housing units (or dwellings).
Housing unit	Conventional house or structurally separate apartment.
Metropolitan Cork	Cork City, the satellite towns of Ballincollig, Blarney, Carrigaline, Douglas, Glanmire, Glounthaune, Carrigtwohill, Midleton and Cobh, together with smaller settlements in between these areas and the City.
Net change in the number of households	The difference between the number of households recorded at two dates.
Obsolescence	Housing unit that is no longer used as such because it has been converted to another use or is uninhabitable or is demolished.
Obsolescence rate	The number of housing units becoming obsolescent in a year, divided by the total number of housing units.
Ring Towns	Kinsale, Bandon, Macroom, Mallow, Fermoy and Youghal.
Satellite Towns	Ballincollig, Carrigaline, Midleton and Blarney.
Second home/holiday home	Housing unit not used as a principal residence.
Study Area	The Plan covers Cork City and its immediate area of influence, so the Study Area (see Figure 1.1) radiates out from the City to include the "Ring" towns of Kinsale, Bandon, Macroom, Mallow, Fermoy, Youghal, and the towns closer to the City including Cobh, Passage West, Midleton, Blarney, Ballincollig and Carrigaline.
Sustainable Development	
- Environmental Sustainability	Living within the capacity of natural environmental systems.
- Economic Sustainability	Ensuring continued prosperity and employment opportunities.
- Social Sustainability	Ensuring greater opportunities to participate in economic success in a way that adds to personal well-being and quality of life.
Vacancies	Dwellings that are not occupied by households at a particular point in time.
Net Density	The no of housing units are exclusive of allowances for additional facilities, roads, etc.
Gross Density	The no. of housing units per unit are inclusive of an allowance for access roads, leisure areas and social facilities.

Appendix B
Study Approach & Consultation

Introduction
The study working arrangements and methodology are set out below. Public consultation has been a critical component of this process, and is described below, as is the outcome of the main public consultation phase.

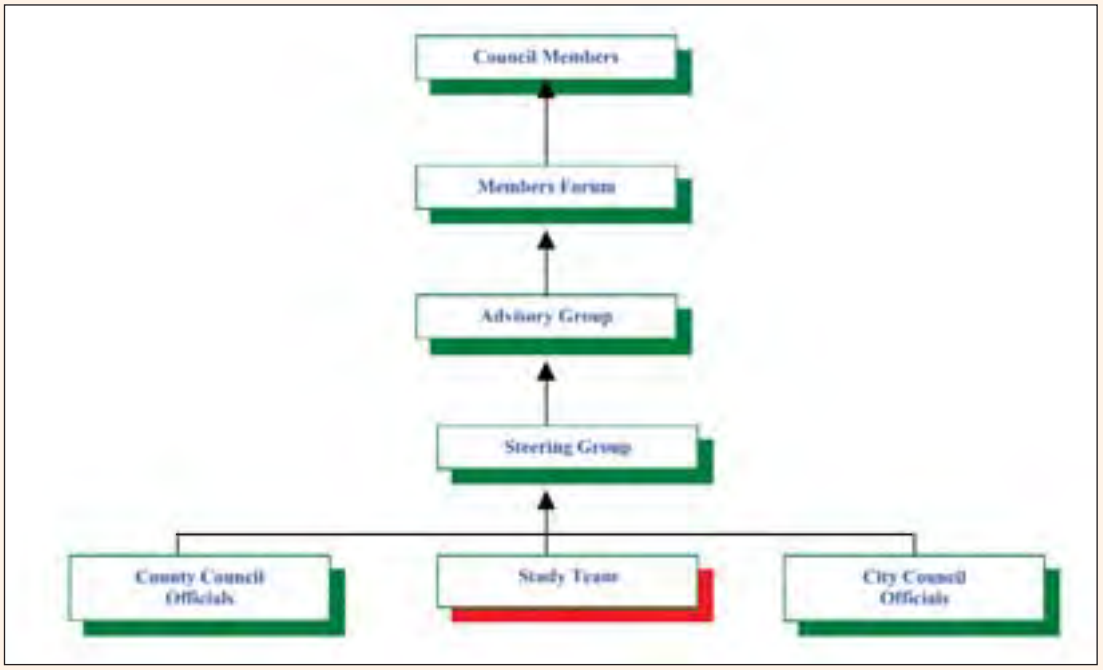
Working Arrangements
This report, the Final Report of the study, has been prepared by a consortium of consultants under the direction of a Steering Group, technical Working Groups, an Advisory Group and a local authority elected Members Forum, as set out in below.
The report is based on work that is more fully described in various working papers listed in Annex I.
The Steering Group was appointed by the City and County Managers and comprises officers from Cork City Council and County Council (see Annex II for details). The Advisory Group includes representatives from private sector interests, central governments, other public bodies and the community and voluntary sector. The Advisory Group is similar to the Cork Land Use and Transportation Study (LUTS) Technical Committee. Its membership is listed in Annex II.

The Members' Forum comprises elected members of Cork County Council and Cork City Council, as shown in Annex II. It resembles the LUTS Joint Committee.

Study Methodology
A 10-stage study approach was adopted, as shown overleaf. Stage 1 was the project inception stage when the detailed methodology and working arrangements were agreed with the client. During Stage 2, an inward investment specialist worked with key stakeholders to develop a strategic vision for the area, and the study goals and objectives were proposed and discussed. Stage 3, the consultation stage has been on-going throughout the project, and is described overleaf.

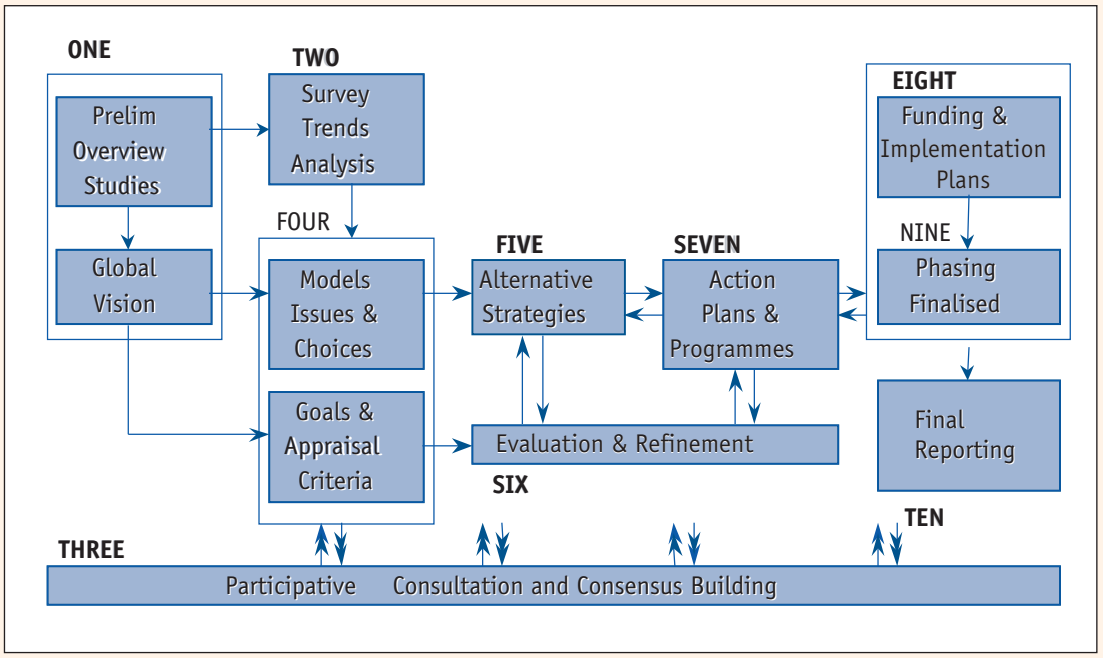
Stage 4 was the data collection and analysis stage, which resulted in the identification of the important issues and choices facing the Study Area. Stage 5 followed when a number of strategic packages were identified to address the choices. These alternatives were evaluated based on the goals and objectives that had been developed earlier in the study.

During Stage 6, a preferred strategy was developed, based on the outcome of the alternative strategy assessment. An Interim Report was then prepared, which set out the preferred strategy in some detail and explained the preceding work stages. The Interim Report was issued to the Steering Group in August 2000. Following discussion and consultation, the preferred strategy was refined and re-evaluated.



In Stage 7, the transport strategy was analysed and developed in more detail. The proposed project for Cork City Docks was also examined closely. Stage 7 over-lapped with the end of Stage 6, in order that the preferred strategy refinement was informed by the latest analysis. Stages 8 and 9 were concerned with the strategy implementation, namely the issues of phasing, financing, management and monitoring, and stage 10, final reporting.

Consultation Process
In the preparation of the Terms of Reference for the Cork Area Strategic Plan study an extensive programme of consultation was undertaken with key local players and decision makers, and with local



interest and amenity groups. Through this process the issues facing the Study Area, as perceived locally, were identified, giving the study its starting point.

During the current study, participative consultation was held on a number of different levels in order to encourage the progress of the study within the agreed time frame. The following mechanisms were employed:

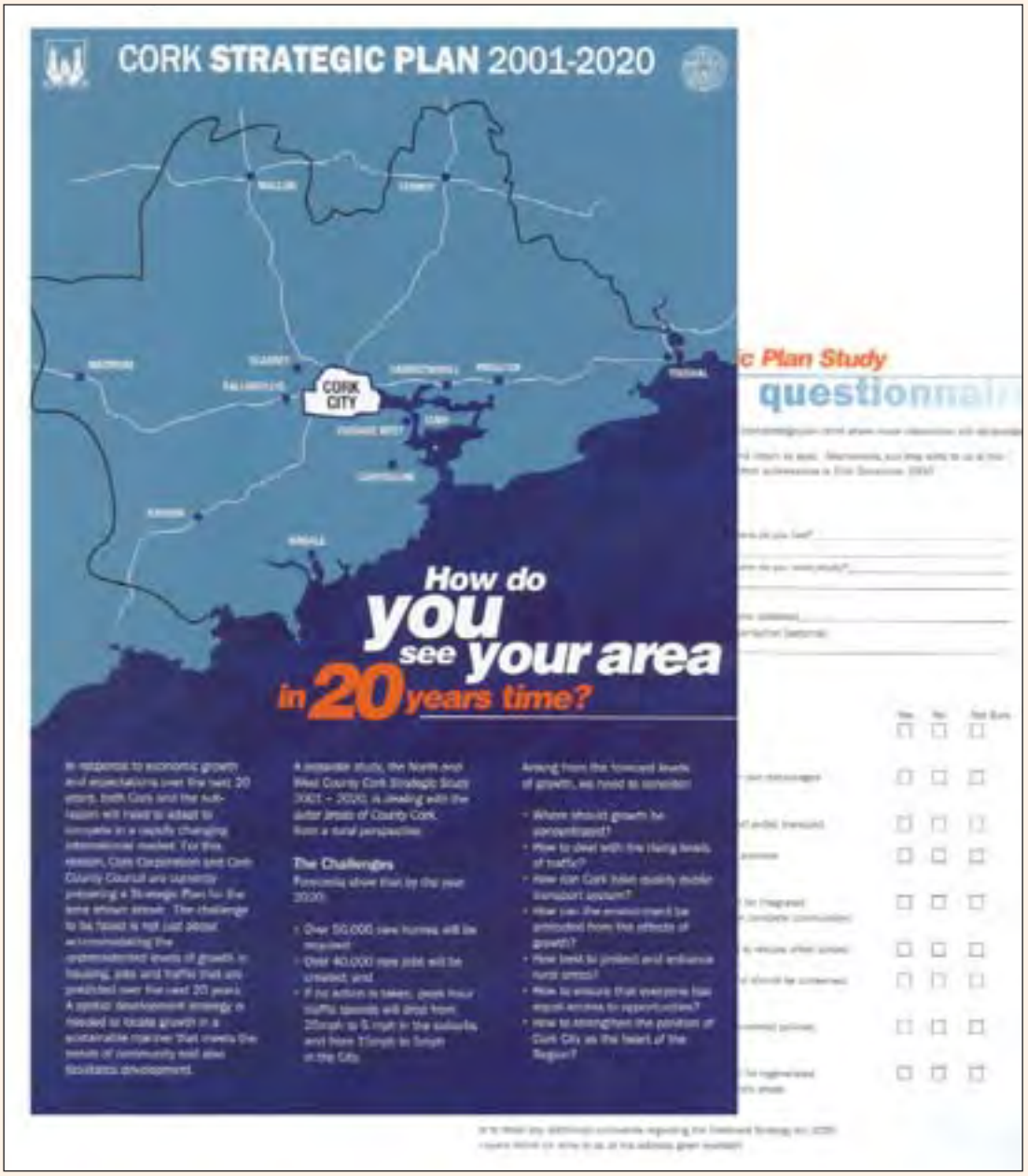
- **Steering Group Meetings:** The Steering Group met the consultants every fortnight to discuss issues and to monitor progress.
- **Advisory Group Meetings:** The Advisory Group met regularly during the study and made formal comment on the Interim Report.
- **Members' Forum:** The Members' Forum met four times prior to the public consultation sessions. Also presentations were made to City Members and County Members (full Council), the City Development Forum and County Development Forum. The Members' Forum approved the Interim Report for the purpose of public consultation.
- **Stakeholder Seminar:** In order to maintain continuity with the process carried out during the compilation of the Terms of Reference, a seminar was held in June 2000 involving representatives of the groups previously involved. The objective of the seminar was to debate the goals and objectives for the study and to discuss the main issues arising from the analysis and forecasting stage of the study.
- **Public Consultation:** In November and December 2000, following Members' Forum approval, a series of open public information days took place at nine locations throughout the Study Area during a two week period. An exhibition summarising the work of the study and explaining the preferred Strategy was presented at each location. The exhibition was advertised beforehand in the national and local press. A publicity leaflet with a tear-off postage-paid response form and questionnaire was also distributed, as shown on the following page. The information exhibited at each of the consultation locations was also reproduced on the Cork City website www.corkcity.ie/corkstrategicplan. The website also contained additional information such as the Executive Summary of the Interim Report. The response to the questionnaire is summarised in the following paragraphs.

Throughout the progress of the project the study team held working meetings with the management, planners, engineers, and staff officers of both the Corporation and the County Council. The study team sought to inform itself on local news and facts and consequently consulted with specific local stakeholders.

Outcome of Consultation

The early consultations and Stakeholder Seminar informed the Interim Report. In the same way, the in-depth consultation on the Interim Report and subsequent assessment by the study team resulted in changes and amendments to the interim proposals to arrive at the proposed Strategic Plan set out in this report.

Appendix B
Study Approach & Consultation



Written submissions were received from 49 people or organisations (see Annex IV), in addition to 261 completed questionnaires / response forms.

Particular reaction to the work of the study is discussed below, in terms of the overall study goals. The responses indicated that the study goals command widespread public support.

Economic Development

A general desire for economic growth is apparent, and has been linked to the provision of a good telecommunications and transport system. Improvements to the City centre and the redevelopment of the Docks are seen as vital not just for economic development, but for the marketing of the region. The Harbour and Port is seen as Cork's unique selling point and potential marketing tool.

Recent economic growth has not been evenly spread which has resulted in different attitudes at the local level. People in many areas are hungry for increased economic development - this includes many of the Ring Towns, the City centre and the Northside. Where rapid growth has occurred in recent years, for example Carrigaline and Ballincollig, the desire for consolidation and the provision of a wider range of local services appears to be greater than the wish for physical expansion.

There is strong feeling that employment in the Ring Towns needs to grow. It is also recognised that the potential development of these towns as dormitory towns for the City is not desirable and is no substitute for local jobs-led growth.

Social Inclusion
Although social inclusion was recognised as a theme underpinning all aspects of the Strategic Plan, much discussion has been centred on housing. Affordable housing and social cohesion were noted as being vital for continued economic development. A wish for a new direction in the provision of social housing came across at all stages of the consultation process. Some 77 per cent of consultees agreed with the statement "Housing units types and sizes in the same areas should be mixed to promote balanced communities". The role of improved public transport in promoting social inclusion by improving access to jobs and education was widely recognised.

Environment
There is a consensus that strong environmental policies should be at the core of the Strategic Plan. Some 91 per cent of all consultees agreed with the statement that "Heritage and amenity locations should be protected by strong environmental policies". Some 84 per cent of consultees agreed that "The countryside should be protected and high quality agricultural land should be conserved".
The statement "A clearer distinction should be made between urban and rural areas to reduce urban sprawl" showed 72 per cent of consultees in favour, so it appears that there is growing public support on the question of reducing once-off housing in the countryside which has vexed Irish planners for at least 30 years. However, a strong voice for rural dwellers to be permitted to build in rural areas was also heard throughout the consultation process.
In the urban areas, consultees often mentioned a desire for a better pedestrian environment, more parks and green spaces, and supported the concept of ecological corridors between settlements. The role of public transport in protecting the environment was widely accepted.
The Green Belt around Cork City has been hotly debated. While the overall impression is that most residents think it should only be modified with good reason, there is a strong set of opinion that feels it is a constraint on the development of the City.

Balanced Spatial Development
Early consultations suggested that there was support for public transport-led patterns of development. This theme was again borne out by the results of the public consultation where 87 per cent agreed that "New housing development should be accessible to public transport, to the City and other Centres"; however, only 46 per cent agreed with the statement that "Higher density development should be encouraged in order to support public transport".
As part of the implementation process, this theme needs to be further developed with the communities to develop understanding of the range of benefits that would accrue from raising densities from the extremely low densities that exist in Cork at present.

Some 86 per cent also agreed that "Business and job opportunities shopping and social facilities should be integrated with housing development to reduce travel and create complete communities".

Urban Renewal
Some 89 per cent of consultees agreed that "The City has an important role as the heart of the region, and should be regenerated to attract high quality jobs, housing and services, and to protect historic areas". This point had complete consensus, even from those from outside the City. It is strongly felt that Cork City needs major regeneration urgently.

Transportation
Concerns about growing traffic congestion and the need for an attractive public transport system have been high on the agenda for many consultees throughout the process, and there appears to be support for car restraint as 87 per cent of consultees agreed that "High quality, convenient public transport should be provided, and car use discouraged at peak times and in urban areas".
In-depth discussions demonstrated an awareness of how local factors such as size and density limit the public transport choices available for Cork, and an appreciation of the role of walking, cycling, buses and local traffic management.

Specific Issues
Some community groups made submissions expressing concern about the implications of the Plan on their local area, although, the strong strategic reasoning behind the Plan was generally recognised. Nevertheless, the residents' concerns are both valid and important. These can only be addressed by Local Area Plans, which should be undertaken as soon as possible, for all developing, expanding or regenerating areas.

As a result of consultation, the publication of additional research and data on the housing market, and information emerging from the National Spatial Strategy Study, the short term housing targets were increased following consultation.

Summary
A rigorous methodology and accountable reporting structure was applied to the study. Key local stakeholders were consulted at critical stages in the project, and the public participated in the development of a strategy. At a strategic level, the general public and elected members were shown to support the process and outcome of the study.

Annexe I

List of Working Papers

Discussion Paper A:	Spatial Planning: Emerging Agendas and Models (Appendix to Inception Report)
Cork Area Strategic Plan:	Place Marketing Analysis & Recommendations
Discussion Paper B:	Goals and Objectives
Discussion Paper C:	Survey and Analysis
Discussion Paper D:	Issues and Choices

Interim Report (August 2000)

Discussion Paper E:	Strategy Phasing and Key Projects	
	Appendix 1	Preliminary Planning Study for Cork Docks Redevelopment
	Appendix 2	Transportation Technical Report

Public Consultation Feedback Report

Annexe II

Membership of Consultative Groups

Steering Group

Mr Dan Buggy	Assistant City Manager, Cork City Council
Ms Ann Bogan	Senior Executive Planner, Cork City Council
Mr Tony Fleming	Senior Engineer, Cork City Council
Mr Donal Barrett	Assistant County Manager, Cork County Council
Mr Ger O'Mahony	Development Officer, Cork County Council
Mr Brendan O'Sullivan	Senior Executive Planner, Cork County Council
Mr Dan Ryan	Acting Deputy County Engineer, Cork County Council

Advisory Group

Mr Joe Gavin	City Manager, Cork City Council
Mr Maurice Moloney	County Manager, Cork County Council
Mr Kevin Terry	City Engineer, Cork City Council
Mr John O'Donnell	City Planner, Cork City Council
Mr Jack Matson	Acting County Engineer, Cork County Council
Mr Brendan Kelleher	Chief Planning Officer, Cork County Council
Mr Ed O'Callaghan	Department of Public Enterprise
Mr Ken Mawhinney	Department of Environment and Local Government
Mr Pascal Griffin	Engineer Inspector, National Roads Authority
Mr Paddy Gallagher	Regional Manager, IDA
Mr Brian Quinlan	Regional Director, Enterprise Board
Mr Denis Healy	Cork Harbour Commission, Port of Cork
Insp. Peter Callanan	Garda Siochana, Anglesea Street Garda Station
Mr Joe Fitzgerald	Regional Manager, Bus Éireann
Mr Tim Sheehan	Regional Manager, Iarnrod Éireann
Mr Clayton Love Jnr.	Cork Chamber of Commerce
Mr Pat Ledwidge	Director of Community Enterprise, Cork City Council
Ms Mary O'Halloran	Director of Community Enterprise, Cork County Council
Mr Pat O'Callaghan	Regional Director, FÁS
Prof Aidan Moran	Registrar, Educational Institutions, UCC
Mr Michael Noonan	Assistant Principal, Educational Institutions, CIT
Ms Mary Maguire	Network Planning Engineer, ESB
Dr Donncha O'Cinneide	Engineering Department, UCC

City Members' Forum	County Members' Forum
Alderman Noel O'Flynn, T.D.	Councillor Noel Collins
Councillor Billy Kelleher, T.D.	Councillor Alan Coleman
Alderman John Dennehy, T.D.	Councillor Thomas Ryan
Councillor Sean Martin	Councillor Deirdre Forde
Councillor Jim Corr	Councillor PJ Walsh
Councillor P J Hourican	Councillor Tom Sheahan
Councillor Joe O'Flynn	Councillor Michael Creed, T.D.
Councillor Michael O'Connell	Councillor Patrick Buckley
Councillor Jonathon O'Brien	Councillor Frank Metcalfe
Councillor John Minihan	Councillor Tadg O'Donovan

Annexe III

Response to Consultation Questionnaire

Question	Yes %	No %	Not Sure %
1. New housing development should be accessible to public transport, to the City and other centres.	87	2	11
2. High quality, convenient public transport should be provided, and car use discouraged at peak times and in urban areas.	87	2	11
3. Higher density development should be encouraged in order to support public transport.	46	19	34
4. Housing units, types and sizes in the same area should be mixed to promote balanced communities.	77	6	16
5. Business and job opportunities, shopping and social facilities should be integrated with housing development to reduce travel and car usage and create complete communities.	86	3	11
6. A clearer distinction should be made between urban and rural areas to reduce urban sprawl.	72	7	20
7. The countryside should be protected and high quality agricultural land should be conserved.	84	2	14
8. Heritage and amenity locations should be protected by strong environmental policies.	91	1	8
9. The City has an important role as the heart of the region, and should be regenerated to attract high quality jobs, housing and services; and to protect historic areas.	89	2	10

Annexe IV

List of Those Who Made Written Submissions

Advisory Group
Mr Kevin Terry, City Engineer
Mr Clayton Love Jnr.
Dr O'Cinneide, UCC
Mr Denis Healy, Port of Cork
Mr Paddy Gallagher, IDA
Mr Joe Fitzgerald, Bus Éireann
Profesor Aidan Moran, UCC
Mr Brendan Kelleher, Chief Planning Officer, County Council
Mr Brian Quinlan, Enterprise Ireland
Mr Ken Mawhinney, Department of the Environment
Ms Katherine Larkin, Talamh Nua (Project Manager for North and West County Cork Strategic Plan Study)
Mr Ed O'Callaghan, Department of Public Enterprise
Mr Tim Sheehan, Iarnrod Éireann

Individual Members of the Public
Mr Allan Navratril
E Montague
M Sleeman Power
K O'Donoghue
Mr William Loftus
Mr Greg O'Neill
Mr Daragh Glavin
Mr Donal Horgan
Mr Denis Kelly
T Murphy
Dr E Doyle
Mr Tim O'Sullivan

Local or Residents' Groups
Mr Oliver Sheehan, Chairman
Carrigtwohill Community Council
Mr Maurice J Coveney/John Martin
Carrigaline Electoral Area Community & Voluntary Forum
Mr Declan O'Connor, Chairman /
Dan Murray, Secretary
The Rise Residents, Bishopstown
Mr John Aherne, Technical Committee
Mourneabbey Residents Trust Fund
Dr Eoin Monaghan, Secretary
Rathpeacon Community Association

Chambers of Commerce
Mr Pat Owens, President
Mallow Chamber of Commerce
Mr Michael F Geary
Cork Chamber of Commerce
Mr Diarmuid A Keogh,
Industry & Infrastructure Sub-Committee
Youghal Chamber of Commerce
Ms Margaret Martin, Chief Executive
Cobh & Harbour Chamber of Commerce

Area Based Organisations
Mr Joe Snow, Hon. Sec. /
Eugene Murphy, Town Commissioner
Passage West Area Development & Environmental Association
Mr Liam Ryan, Vice Chairperson
Timoleague Community Centre
Mr John Coleman, Chairman /
Ryan Howard, Chief Executive Officer
East Cork Area Development Ltd
Ms Angela Corcoran, President
Ballincollig Enterprise Board

Representation Groups
Mr Jerry O'Sullivan, County Secretary
West Cork Irish Farmers Association
Ms Bernadette Connolly
Muintir na Tire
Ms Rose Burns
Irish Motorcyclists' Action Group
Mr Joe O'Brien, Director
Construction Industry Federation
Mr John Baker
Regrowth
Auveen Byrne Associates
for Ballycummin Construction Ltd
Auveen Byrne Associates
for Dan Sheehan
Ms Patricia O'Connor, Senior Environmental Officer
South Western Regional Fisheries Board

Appendix B
Study Approach & Consultation

Appendix C
Strategic Guidance Statements

Sustainable Development
The movement towards a more sustainable form of development underpins the Cork Area Strategic Plan in line with Government policy. The following overall sustainable development policy reflects the principles of this approach. While not all of the sustainable objectives can be achieved equally for each development, the planning authorities should require all developers to move towards achieving greater sustainability.

Strategic Guidance: Sustainable Development
All developments should be assessed as to how far they:

- maximise access to and foster the use of public transport, cycling and walking.
- conform to sustainable settlement policy.
- minimise the cost of providing utility services (water, sewage, drainage, electricity, and waste collection).
- allow the economic provision or improvement of roads and community services such as schools.
- avoid areas of land susceptible to flooding and natural hazards.
- make maximum use of brownfield sites and existing infrastructure and facilities.
- minimise, as far as possible, the impact upon non-renewable resources such as good quality agricultural land.
- minimise the adverse impacts upon important environmental features, including outstanding or valued landscapes, protected habitats and species, river catchment areas, marine systems and cultural heritage.
- encourage and require the sensitive siting of developments and high quality design, in keeping with the local character, and the historic and natural environment and promotion of the economic and social development of all sections of the community.

National Spatial Context
The spatial strategy and phasing programme set out in the Cork Area Strategic Plan allows for and would benefit from additional growth.

Strategic Guidance: National Spatial Context
Under its emerging National Spatial Strategy, the Department of the Environment and Local Government should be encouraged by the local authorities, in partnership with other key local stakeholders, to redirect to Cork a feasible and realistic proportion of the high growth sectors that would otherwise be attached to the Dublin region.

Social Inclusion
The proposed strategy aims to create much greater scope for social inclusion by promoting mixing of income groups on the scale of broad districts, and by improving access to jobs, public transport, services and education. Social and affordable housing should be provided in all expansion areas in Metropolitan Cork, and on a smaller scale in the Ring Towns. New Local Area Plans and the forthcoming Joint Housing Strategy should identify targets for each housing market area.

Strategic Guidance: Social Inclusion
Both authorities should facilitate the provision of social and affordable housing schemes in accordance with a Joint Housing Strategy.
Encouragement should be given to improving the range, type and tenure of housing in all locations.
In common with all housing, social and affordable housing should be located near to major public transport routes, employment zones and well connected to retail service areas and educational facilities.

Cultural Development
Cork has a rich, indigenous tradition in the arts, literature, music and dance and a wonderful culture. It is the nature of the City and its surroundings and its people that intimacy and perspective can be reconciled with energetic commerce. With the projected impetus to economic and social improvements that should flow from the implementation of the Cork Area Strategic Plan, the cultural, arts, education and leisure dynamics should be nurtured and given scope and space to develop. This should greatly enhance the quality of life.

Strategic Guidance: Cultural Development
The City Council and County Council should encourage the provision of new facilities and development throughout the Study Area in order to promote and facilitate the cultural, artistic and recreational needs of the population. Development that might adversely affect cultural resources should be resisted.

Local and Detailed Planning
Local Area Plans
The Cork Area Strategic Plan should set broad targets for the size and phasing of new and expanded settlements. The City and County Development Plans should identify development policies and standards and set the context for the Local Area Plans.

Strategic Guidance: Local Area Plan
Local Plans should:

- be based on extensive public participation and consultation.
- be based on an understanding of the existing settlement(s), their character, the way they function and their needs.
- determine local strengths, weaknesses, opportunities and constraints.
- identify technical feasibility studies required.
- identify improvement to existing facilities.

- address housing, employment, retail, transport, recreation and community services.
- plan new areas and integrate with existing.
- prepare an integrated transport strategy.
- create urban character and form.
- create networks of open spaces, landscaping and green areas.
- develop recycling and waste management proposals.
- develop amenity proposals.
- identify environmental protection.
- programme infrastructure.

New and Expanded Settlements
In developing new or expanded settlements, local planning authorities should be guided by the following principles:

Strategic Guidance: Expanded Settlements
Proposals should be expected to provide:

- High quality town or village environment.
- New standards for design.
- Assimilation of new development with minimal adverse affect on the character of established areas.
- Excellent public transport.
- Balanced, self contained communities integrating living, working, shopping, education and leisure activities.
- A variety of house types and tenures for all incomes.
- Natural, landscape setting.
- Proposals for recreation and amenity.
- Recycling and waste management proposals.

Improved Layout and Design
The achievement of higher housing densities should require a more imaginative and challenging residential layout. This is likely to include a re-evaluation in the design principles and functions of residential roads, a reduction in the scale and design principles of local roads, and a more precise, functional approach to the provision of a mix of housing types, of local open space in new housing areas. Considerable advances in the quality of housing layout and design have been made elsewhere in Europe, which indicates that both higher densities and higher quality and safer residential environments can be achieved, whilst at the same time reducing the per capita cost of infrastructure provision.

Strategic Guidance: Urban Design and Layout
The authorities should prepare guidance to developers with the aim of raising the overall quality of residential developments and making more efficient use of serviced land. Advice should be included on improving housing layouts, provision of a greater variety of dwelling types and designs, more efficient and pedestrian friendly access and circulation arrangement, as well as landscaping and recreational provision.

Strategic Guidance: Housing Size Mix
When assessing housing development proposals, both authorities shall have regard to the housing size distribution targets, as set out in Table 6.2 of this report (and any subsequent reviews) in order to reflect the projected future demographic structure of the Study Area in the provision of new housing, including social housing.

Guidance on Spatial Development
The spatial strategy outlined in previous sections seeks to direct economic and population growth to those areas best able to accommodate it. The policy underpinning this is predicated upon sustainable development principles and the study goals and objectives, and housing in particular, should be directed to those areas where it can be accommodated in the most sustainable manner.

The City
Strategic Guidance: City Development
Cork City should be developed as the centre of a dynamic sub-region through investment in new transport infrastructure and regeneration, including the Kent Station and Docklands area.

Metropolitan Cork
Strategic Guidance: Development Policy for Metropolitan Cork
Major new growth areas in Metropolitan Cork should be developed in the Blarney, Rathpeacon / Monard area, at Carrigtwohill and Midleton. Existing settlements at Ballincollig, Carrigaline and the South City environs should be consolidated. All development areas should be served by high quality rail or bus services.

The greater majority of development should be clustered around existing or new public transport nodes, and the expansion should be carefully integrated with the existing settlements so as to form coherent wholes.

Metropolitan Cork should be defined by an enlarged Green Belt in order to provide a landscape buffer between each settlement. Land uses that would be considered appropriate in the Green Belt would be agriculture, open sports and recreational facilities, deciduous woodlands and nature conservation areas. Regulations controlling development in the Green Belt should be reviewed with the aim of reducing isolated urban generated housing development in the countryside.

The Ring Towns and Rural Areas
Policies for the Rural Areas reflect the overall strategic theme of the Plan, which is to concentrate new development in compact, sustainable forms, easily serviced by public transport, utilities and social, cultural and commercial facilities. Development should be essentially employment led in order to prevent the

Appendix C
Strategic Guidance Statements

Ring Towns and rural areas becoming dormitory suburbs of Metropolitan Cork. It should also be sited so as to protect natural resources, including good quality agricultural land, the character and quality of the landscape, the natural environment and recreational resources.

Strategic Guidance: Ring Towns
The Ring Towns should be given a key role in ensuring the economic success of the Study Area and particularly, the rural areas. Growth of the towns should be directly related to increased employment provision.

Strategic Guidance: Rural Hinterland
Existing villages should be the primary focus of development in the countryside, based upon the development of small scale businesses. The scale of potential growth in each settlement should be assessed in relation to their proximity to the main road network, the range and capacity of existing community facilities and infrastructure or the ability to support new services, and local environmental constraints.

Housing in rural areas and single houses in the countryside will be subject to a Rural Housing Strategy to be completed in conjunction with the adoption of the next County Development Plan in 2003.

Employment Development
The distribution of new employment should be determined by the overall thrust of the spatial development strategy. Employment should be located in areas that have the appropriate infrastructure to accommodate the development, will not cause congestion or other environmental disbenefits, and where synergies can be fully exploited.

Strategic Guidance: Employment Location
A large proportion of office demand should be met in the Inner City. The development of an international quality office quarter in the Docklands should be facilitated and accompanied by international marketing.

In Metropolitan Cork there are a number of existing commitments for relatively large scale business and industrial parks. Over the next five years or so, consideration should be given to restricting the supply of permissions in suburban locations in order to encourage City centre office development. Thereafter, in parallel with City centre development, continued business park and new distribution park development should be planned at key nodes on the transport network so as to provide good accessibility by road and public transport. A range of sites should be considered in order to match investor and occupier requirements.

Offices should be situated next to rail stations and rapid bus ways in both business parks and suburban centres. All other employment parks should be linked by feeder buses to rail and bus ways.

The supply of land and buildings for commercial uses in suburban areas should be monitored, and planning permissions controlled, so as to avoid oversupply.

A 'Science City' project should be promoted in association with research institutions, aiming to harness the most advanced technologies to manufacturing.

In the Ring Towns, existing business parks should be completed, and new ones provided ahead of demand on sites accessible to major roads, as well as public transport.
Isolated factories should not be encouraged in the countryside, although small units may be appropriate in villages and larger units in Ring Towns or Metropolitan Cork.

Higher Education
Higher education should be encouraged and facilitated throughout the Study Area.

Strategic Guidance: Higher Education
The role and contribution of UCC and CIT to the social cultural and economic well being of Cork should be strengthened, fostered and promoted. In particular links between third level institutions and new related employment initiatives should be supported and facilitated.
Access to educational opportunity in Cork should be facilitated for all by improving the spatial balance of institutions and by working actively to reduce other access barriers.
Existing higher education and research institutions should be fostered as a platform for innovation and improved competitiveness.

Transport
European and national policy seeks to discourage private car usage and road haulage when alternative modes of transport are possible, such as public transport, cycling or walking, and to reduce travel demands by integrated landuse planning.
Public transport is a major contributor to improving economic development potential and social cohesion by providing greater choice of access and improving accessibility of services. It also assists in meeting objectives relating to the environment and the revitalisation of the City.

Strategic Guidance: Integrated Transport
Integrated local transport plans should be prepared for the City centre, the Docks/Kent Station redevelopment, Douglas, Bishopstown, Carrigaline/Ringaskiddy, Carrigtwohill, Ballincollig, Midleton,

Blarney/Monard/Rathpeacon, Kinsale, Bandon, Macroom, Mallow, Fermoy and Youghal. Ideally, Integrated Local Transport Plans should be co-ordinated with and undertaken with Local Area Plans; however, some areas may require special transport plans in advance of Local Area Plans if local transport conditions demand.

Integrated local transport plans for each town should address the rural transport issues for its hinterland, based on local issues and choices.

Strategic Guidance: Public Transport
The provision and improvement of public transport services across the Cork sub-region should be promoted in partnership with Bus Eireann, Iarnrod Eireann and private operators. All the partners should embrace the concept of "total journey quality", to improve every stage of the public transport experience, from the initial enquiry to the final walk to the destination, including the ride itself, the wait and the walk to the stop or station. It should also include an integrated ticketing system, possibly using smart cards.

Strategic Guidance: Green Routes
A network of Green Routes should be developed throughout Metropolitan Cork as priority routes for buses, cyclists and walkers.

Strategic Guidance: Commuter Rail
The authorities and CIE (or its successor) should develop an integrated, frequent service rail network from Blarney to Midleton and Cobh, and an improved, frequent service from Mallow (and Youghal in the longer term) via a redeveloped Kent Station, which should facilitate through-running services and multi-modal interchange.

Strategic Guidance: Safeguarding Future Rail Corridors
Planning authorities should seek to identify potential corridors for light rail services and safeguard their alignment in the Development Plan.

Strategic Guidance: Modal Shift
Measures to achieve a shift from private car to alternative forms of transport should be encouraged and supported.

Multi-modal interchanges should be developed at Kent Station and the existing and proposed local stations, the airport, and the proposed Park and Ride site at the Kinsale Road and Bandon Road Roundabout.

Strategic Guidance: Roads
There should be greater co-operation and liaison between the NRA and the authorities, and the proposed road improvements should be integrated with the land use requirement.

Facilities for pedestrians, cyclists and buses should be incorporated into the design of all road schemes. Road schemes should not preclude increasing the priority given to non-car users in the future.

Strategic Guidance: Commuter Plans
Consideration should be given to encouraging existing large employers and requiring new employers to prepare Commuter Plans.

Strategic Guidance: Walking
Schemes to promote walking, enhance and improve the safety of the pedestrian environment and the walk links to public transport, should be of highest priority in the Green Routes Network for Metropolitan Cork, and in the local transport plans which should be prepared for individual towns.

Strategic Guidance: Cycling
Measures should be provided to encourage cycling and improve safety for cyclists, including improved infrastructure, better integration with public transport, education, training and marketing. As part of their Commuter Plans, employers should provide on-site parking, showering and changing facilities for cyclists.

Strategic Guidance: Motorcycles
Measures should be developed to facilitate and improve safety for motorcycles.

Strategic Guidance: Parking
Parking supply, location and pricing for the City centre and other centres should be continuously updated as a car restraint mechanism, balanced with the needs for local economic vitality and viability, and the needs of local residents. Parking policy review should be included in local transport plans.

Strategic Guidance: Port
The Port of Cork's Strategic Development Plan should be adopted, subject to on-going partnership with the Cork Area Strategic Plan, particularly with respect to:

- Promotion of the Harbour and Docks area for leisure and amenity; and as a unique selling point for the Cork City-Region with regard to quality of life.
- Co-ordination of the Docks redevelopment with the relocation of commercial port activities to Ringaskiddy, and other appropriate locations, and safeguarding the Ringaskiddy area for port development.
- Co-ordination of port existing operations and future development at Tivoli and Dunkettle with improvements to the railway. Haulage of freight by rail should be encouraged by the local authorities.

Appendix C
Strategic Guidance Statements

Strategic Guidance: Airport
Measures to improve the range and quality of air services at Cork Airport should be supported.

Road and public transport access to the airport should be improved.

Tourism
Tourism is an important component of the Strategic Plan and the following strategic approach is proposed:

Strategic Guidance: Tourism
The planning authorities should encourage the provision of new tourist attractions and visitor accommodation in the Study Area in accordance with the local settlement policy.

Urban renewal projects which contain a leisure component should be considered favourably.

Activities to be supported in rural areas should include golf, equestrian centres, sea angling and island fisheries.

Proposals for tourist facilities should meet high standards of siting and design. Facilities should relate to the local policy for towns and villages. Facilities should not normally be permitted in environmentally sensitive areas.

Retail
Retail sites should be identified in the Joint Retail Strategy Study. They should be fully integrated with retail and central area functions, other land uses, pedestrian routes, roads, parking plans, public transport nodes etc, in accordance with new Local Area Plans and urban designs. Their release should be phased as a result of monitoring and review processes.

Further, more detailed guidance on strategic retail provision should be provided as part of the Joint Retail Strategy which Cork Corporation and Cork County Council should prepare shortly following the publication of the Retail Planning Guidelines.

Strategic Guidance: Retail
In accordance with the Retail Planning Guidelines the preferred locations for retail development should be town centres or, if there are no town centre sites available, the edge of town centres. Cork City centre is the key centre for major comparison goods shopping in the sub-region, and major comparison shopping developments should be located within or on the edge of the City centre. Other retail development should be located in relation to public transport hubs and car parks so as to function as magnets creating pedestrian flow along key retail frontages.

Utility Infrastructure
A broad analysis of the infrastructural facilities required to service the growth locations identified in the Strategic Plan was undertaken. The detailed technicalities and cost of providing water, foul and storm drainage depends on many variables and these variables will need to be identified and evaluated as part of Local Area Plan studies.

Strategic Guidance: Waste Management, Reduction & Recycling
Cork County Council and Cork City Council are committed to implementing the joint waste management strategy, and to fostering a society focused on waste reduction and the promotion of recycling.

Strategic Guidance: Water supply and conservation
Cork County Council and Cork City Council are committed to the provision of an adequate potable water supply and the promotion of water conservation and responsible use.

Strategic Guidance: Sanitary Services
A strategic plan for the provision of sanitary services needs to be prepared to ensure the timely delivery of the necessary sanitary services for development.

Development should not proceed unless the sanitary services made necessary by the development can be provided at the appropriate time.

Strategic Guidance: Energy
The ESB, Bord Gais Eireann and the local authorities should co-operate to ensure adequate provision of energy for Cork. Electricity and gas supply should be co-ordinated with the planning of other services for new developments. Renewable electricity initiatives should be encouraged as part of general planning policy.

Strategic Guidance: Information and Telecommunications Technology
Information and Telecommunications Technology infrastructure, price, range and quality of service should be improved, for all sections of the community as a matter of urgency.

Environment
The Study Area has a wealth of natural and man-made environmental resources, including important nature conservation areas, valuable watercourses and coastline, attractive landscapes, a strong heritage of buildings, places, archaeological sites, townlands, placenames, woodlands and scenic coastline. It is important to conserve and enhance these resources for a number of reasons. Firstly, the environment has intrinsic value in its own right and protection is required by European legislation. Secondly, it contributes to the area's character and strengths as

an industrial, commercial, tourist, educational and residential location, as well as being an important marketing tool in attracting inward investment. Finally, a high quality environment is also essential for the quality of life of the existing and future population, particularly for recreation.

Strategic Guidance: Nature Conservation
The local authorities should seek to identify and protect additional areas of nature conservation interest, and review existing local designations and levels of protection.

In granting planning permission, developers should seek to minimise their impact upon areas of existing and potential nature conservation importance and should need to demonstrate that mitigation measures have been put into place.

Strategic Guidance: Rivers
All watercourses in both urban and rural areas should be protected and maintained in order to encourage ecological diversity, assist drainage and flood storage, and as recreational and landscaped areas.

River Catchment Management Areas should be developed in order to protect the aquatic environment and identify areas that require protection as specific habitats or for recreational purposes.

Strategic Guidance: Landscape
A landscape character assessment of the Study Area should be undertaken in accordance with advice from the Department of the Environment and Local Government. In the interim, a review of existing landscape protection measures should be carried out and consideration should be given to designating and protecting landscapes currently considered to be of international, national and regional importance.

All new infrastructure should be sensitively and appropriately designed to fit into the landscape of the area through which it passes or in which it is located.

Strategic Guidance: Built and Cultural Heritage
The architectural character and landscape setting of the City, towns and villages should be protected. Substantial use can be made of new powers under the Planning and Development Act 2000 to designate conservation areas, and to integrate the rehabilitation of the historic urban areas with other housing, commercial and cultural development objectives of this Strategy.

Strategic Guidance: Woodland and Forestry
The emphasis of new woodland planting in the Study Area should be on the native and broadleaved species in order to maximise nature conservation, landscape and recreational benefits. Encouragement should be given to the planting of deciduous woodlands close to new and expanded urban areas and in the Green Belt, for use also as recreational areas.

Commercial forestry should not be permitted in environmentally sensitive areas as defined by the County Council.

Strategic Guidance: Coastal Zone
The County Council should consider preparing a Coastal Zone Management Plan for the Study Area, drawing on lessons learned from the pioneering Bantry Bay Coast Zone Charter project and in accordance with emerging National Coastal Zone Management policies and best European practice.

Development in the Coastal Zone should be limited to essential needs, for example, for fisheries and agriculture and any tourist or housing developments should be located within or close to existing settlements. In all cases, any developments should be well sited in relation to the topography, landscape or townscape setting and meet the highest standards of design and materials.

Recreation
A recent study into sports facilities in Metropolitan Cork (Cork Recreational Needs Study, Cork City Council and Cork County Council) recommended, amongst other things, a strategy for the retention and enhancement of existing sports facilities. This approach could be widened beyond the formalised sports covered in that study to include popular activities such as recreational walking, picnicking and other "countryside activities". These activities are important to locals and tourists alike but are under threat from rapid urban development, especially close to existing built up areas where the need for these amenities is at its greatest.

Strategic Guidance: Recreation
Existing sports and recreational facilities should be retained and enhanced and new facilities provided in all major developments.

Planning authorities should examine ways to improve access to the countryside for recreational purposes, such as walking, cycling and horse riding, and seek to provide new rights of way, sign-posting and car parking where necessary.

Local planning authorities should have regard to the requirement to provide a recreational needs assessment, statement or proposals in applications involving groups of dwellings or housing developments.

Appendix D
Strategic Environmental Appraisal of The Proposed Plan

Introduction
Strategic Environmental Assessment (SEA) is the assessment of planning strategies and is intended to ensure that environmental issues are considered at the very beginning of the development process.

SEA are intended to appraise policies, plans and development programmes, rather than specific projects, and are not detailed assessments as exemplified by the more familiar Environmental Impact Assessment (EIA) procedures. Only broad information is available on the background environment at a strategic level and factors such as the location, size, processes and effects of the potential developments are not known. Furthermore, since the SEA covers a large geographical area, detailed assessment is not a realistic option, even if data were available.

Nevertheless SEA serves a number of very valuable purposes:

- It helps clarify the environmental objectives of the Strategic Plan.
- It provides a better understanding of the environmental implications of individual proposals or policies.
- It highlights any potentially conflicting proposals or their impact upon Plan goals and objectives.
- It allows economic, social and environmental factors to be seen alongside each other.
- It illustrates how far environmental matters are taken into account in the Plan.

The SEA of the Cork Area Strategic Plan is presented in a matrix (overleaf), and assesses the policy proposals of the Strategic Plan in the light of the goals and policy objectives set out at the beginning of this report (Chapter 1).

Summary and Conclusions
Overall, the SEA reveals that the policies and specific proposals described in the Cork Area Strategic Plan are generally supportive of the goals and objectives set out at the start of the study. Few policies appear to contradict or conflict with one another, and the number of policies likely to lead to negative impacts is considered very low.

The strategy performs particularly well in terms of providing a robust, well balanced economic structure, improving social inclusion, protecting the environment, promoting urban renewal, providing an integrated public transport system, and promoting efficient expenditure in the provision of infrastructure. Some loss of agricultural land is inevitable given the scale of development envisaged in the Plan, and the lack of brownfield sites available as an alternative location for new development, especially within the County. Furthermore, the disbenefits of the limited encroachment upon the Green Belt are considered to be balanced by the social and transport advantages of developing close to the City.

The SEA also shows that the proposed strategy will mitigate against some objectives, namely those that seek to achieve balanced development across the whole of the Study Area. This outcome was foreseen in the design of the strategy, but is considered to be far outweighed by the considerable achievement of the vast majority of Plan goals and objectives, which could only be met by the proposed strategy.

Specific Plan policies and proposals in all topic areas show overwhelming beneficial impacts. However, some caution in interpreting these results is justified because of the uncertainty of impacts in many areas. The effects of these policies and proposals may be more clearly determined and assessed after the completion of detailed local and subject plans by the City Council and County Council.

Appendix D
Strategic Environmental Appraisal of The Proposed Plan

STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																						
	Economic			Social		Environmental						Balanced Spatial			Urban Renewal		Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sustainable Development																							
Development should be managed so as to how far they:																							
- maximise access to and foster the use of public transport, cycling and walking;	○	○	○	?	○	?	?	✓	○	○	○	○	✓	?	○	○	✓	✓	✓	○	✓	✓	✓
- conform to sustainable settlement policy	○	○	?	✓	✓	?	?	✓	✓	○	?	?	✓	?	✓	✓	○	?	○	○	✓	✓	✓
- minimise the cost of providing utility services (water, sewerage, drainage, electricity, and waste collection);	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓
- allow the economic provision or improvement of roads and community services such as schools;	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- avoid areas of land susceptible to flooding and natural hazards;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- make maximum use of brownfield sites and existing infrastructure and facilities;	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○
- minimise, as far as possible, the impact upon non-renewable resources such as good quality agricultural land;	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- minimise the adverse impacts upon important environmental features, including outstanding or valued landscapes, protected habitats and species, river catchment areas, routine systems and cultural heritage; and	○	○	○	○	○	✓	✓	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- encourage and require the sensitive siting of developments and high quality design in keeping with the local character, and the historic and natural environment and promotion of the economic and social development of all sections of the community.	○	○	○	○	○	✓	✓	○	✓	○	○	○	○	○	○	○	✓	○	○	○	○	○	○
National Spatial Strategy																							
To make the emerging National Spatial Strategy, the Department of the Environment and Local Government should be encouraged by the local authorities, in partnership with other Key local stakeholders, to redirect to Cork a feasible and realistic proportion of the high growth rooting that would otherwise be attached to the Dublin region.	✓	✓	✓	?	○	○	○	○	○	○	○	○	○	○	?	○	○	○	○	○	○	○	○
Social Inclusion																							
Both authorities should facilitate the provision of social and affordable housing schemes in accordance with a Joint Housing Strategy	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Encouragement should be given to improving the range, type and tenure of housing in all locations.	○	○	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○
In common with all housing, social and affordable housing should be located near to major public transport routes, employment zones and well connected to retail service areas and educational facilities.	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Cultural Development																							
The City Council and County Council should encourage the provision of new facilities and development in order to promote and facilitate the cultural, artistic and environmental needs of the population. Development that might adversely affect the cultural development of facilities should be resisted.	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Key: ○ - No relationship or insignificant impact ✗ - Significant adverse impact ? - Uncertain ✓ - Significant beneficial impact

STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																							
	Economic			Social		Environmental					Balanced Spatial				Urban Renewal			Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Local Area Plan																							
Local Area Plans should:																							
- be based on extensive public participation and consultation;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- be based on an understanding of the existing settlement(s), their character, the way they function and their needs;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- determine local strengths, weaknesses, opportunities and constraints;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- identify technical feasibility studies required;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- identify improvement to existing facilities;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- address housing, employment, retail, transport, recreation and community services;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- plan new areas and integrate with existing;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓
- prepare an integrated transport strategy;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	○	○	○	○	○
- create urban character and form;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- create networks of open spaces, landscaping and green areas;	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- develop recycling and waste management proposals;	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- identify environmental protection; and	○	○	○	○	○	✓	✓	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- programme infrastructure;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Expanded Settlement																							
Proposals will be expected to provide:																							
- high quality town or village environment;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- new standards for design;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- assimilation of new development with minimal adverse affect on the character of established areas;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- excellent public transport;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	○	○	✓	○	○
- balanced, self contained communities integrating living, working, shopping, education and leisure activities;	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- a variety of house types and tenures for all incomes; and	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- natural landscape setting;	○	○	○	○	○	○	✓	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○
- proposals for recreation and amenity	○	○	○	○	✗	○	○	○	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○
- recycling and waste management proposals.	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓

Key: ○ No relationship or insignificant impact ✗ Significant adverse impact ? Uncertain ✓ Significant beneficial impact

Appendix D
Strategic Environmental Appraisal of The Proposed Plan

STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																					
	Economic			Social		Environmental					Balanced Spatial			Urban Renewal		Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Urban Design and Layout																							
The authorities should prepare guidance to developers with the aim of raising the overall quality of residential development and making more efficient use of serviced land. Advice should be included on improving layouts, provision of a greater variety of dwelling types and designs, more efficient and pedestrian friendly access and circulation arrangements, as well as landscaping and recreational provision.	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓
Housing Size Mix																							
When assessing housing development proposals, both authorities shall have regard to the housing size distribution targets, as set out in Table 6.2 of this report and any subsequent reviews in order to reflect the projected future demographic structure of the Study Area in the provision of new housing, including social housing.	○	○	○	○	○	?	?	✓	?	?	○	○	○	○	○	?	○	○	○	○	○	○	○
City Development																							
Cork City should be developed as the centre of a dynamic sub region through investment in new transport infrastructure and regeneration, including the Kent Station and Docklands area.	○	✓	✓	✓	✓	○	○	✓	○	○	?	○	✓	✗	✓	✓	✓	✓	○	○	✓	✓	○
Development Policy for Metropolitan Cork																							
Major new growth areas will be developed in the Blarney/Ballincollig/Inniscarra area, at Carrigtwohill and Midleton. Existing settlements at Ballincollig, Carrigaline and the South City environs should be consolidated. All development areas should be served by high quality rail or bus services.	○	✓	○	○	○	?	?	✓	✓	✓	○	○	✓	✓	○	○	○	○	○	○	○	✓	✓
Metropolitan Cork should be defined by an enlarged Green Belt in order to provide a landscape buffer between each settlement. Land uses that would be considered appropriate in the Green Belt would be agricultural, open sports and recreational facilities, deciduous woodlands and nature conservation areas. Regulations controlling development in the Green Belt should be reviewed with the aim of reducing isolated urban generated housing development in the countryside.	?	?	?	?	?	?	✓	?	✓	✓	?	?	✗	?	?	?	?	?	?	?	?	?	?
Ring Towns																							
The Ring Towns should be given a key role in ensuring the economic success of the Study Area and particularly the rural areas. Growth of the towns should be directly related to increased employment provision.	○	✓	○	?	✓	○	?	?	○	?	✓	✓	✓	○	○	○	○	○	○	○	✓	✓	?
Rural Hinterland																							
Existing villages should be the primary focus of development in the countryside, based upon the development of small scale businesses. The scale of potential growth in each settlement should be assessed in relation to their proximity to the main road network, the range and capacity of existing community facilities and infrastructure or the ability to support new services and local employment generation.	✓	✓	○	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	○	○	○	○	○	○	✓	○	✓	✓

Key: ? No relationship or insignificant impact ✗ Significant adverse impact ? Uncertain ✓ Significant beneficial impact

STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																					
	Economic			Social		Environmental					Balanced Spatial				Urban Renewal			Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Employment Location																							
A large proportion of office demand should be met in the Inner City. The development of an international quality office quarter in the Docklands should be facilitated and accompanied by international marketing.	✓	✓	✓	✓	○	✓	✓	?	✓	○	○	○	✓	✓	✓	✓	✓	✓	?	?	✓	✓	✓
In Metropolitan Cork there are a number of existing commitments for relatively large scale business and industrial parks. Over the next five years or so, consideration should be given to restricting the supply of permissions in suburban locations in order to encourage City centre office development. Thereafter, in parallel with City centre development, continued business park and new distribution park development should be planned at key nodes on the transport network areas to provide good accessibility by road and public transport. A range of sites should be considered in order to match investor and occupier requirements.	✓	✓	✓	○	○	?	?	?	?	?	○	○	?	✓	○	○	○	✓	✓	✓	✓	✓	✓
Offices should be situated next to rail stations and along green routes in both business parks and suburban centres. All other employment parks should be linked by feeder buses to rail and bus stops.	○	✓	○	✓	○	?	✓	✓	○	○	○	?	✓	✓	○	?	✓	✓	?	✓	✓	✓	✓
The supply of land and buildings for commercial uses in suburban areas should be monitored, and planning permissions controlled, so as to avoid oversupply.	○	✓	○	○	○	○	○	✓	○	○	✓	○	✓	○	✓	✓	✓	✓	○	○	✓	✓	✓
A "Science City" project should be promoted in association with research institutions, aiming to harness the most advanced technologies to manufacturing.	✓	○	✓	?	○	?	?	?	?	○	?	○	✓	?	?	○	○	○	○	○	○	○	○
In the Ring Towns, existing business parks should be completed, and new ones provided ahead of demand on sites accessible to major roads, as well as public transport.	○	?	○	?	○	?	?	?	?	○	✓	✓	?	○	○	○	○	?	○	○	?	?	?
Isolated factories should not be encouraged in the countryside. Small units may be directed to "Growth Villages", larger units to Ring Towns or Metropolitan Cork.	○	○	○	?	○	✓	✓	✓	✓	○	?	✓	✓	○	○	○	○	○	○	○	✓	✓	✓
Higher Education																							
The role and contribution of UCC and CIT to the social cultural and economic well being of Cork should be strengthened, fostered and promoted. In particular links between third level institutions and new related employment initiatives should be supported and facilitated.	✓	○	○	?	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Access to educational opportunity in Cork should be facilitated for all by improving the spatial balance of institutions and by working actively to reduce other access barriers.	○	○	○	○	○	✓	○	○	○	○	○	○	○	?	○	○	○	○	○	○	○	○	○
Existing higher education and research institutions will be fostered as a platform for innovation and improved competitiveness.	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Integrated Transport																							
Integrated local transport plans will be prepared for the City centre, the Docks/Kent Station redevelopment, Douglas, Blackpool/Kinsale, Carrigaline/Ringaskiddy, Carrigtwohill, Ballincollig, Midleton, Blarney/Monard/Rathpeacon, Kinsale, Bandon, Macroom, Mallow, Fermoy and Youghal. Ideally, Integrated Local Transport Plans would be co-ordinated with and undertaken with Local Area Plans; however, some areas may require special transport plans in advance of Local Area Plans if local transport conditions demand.	○	✓	○	✓	✓	✓	✓	✓	✓	✓	○	○	✓	○	✓	✓	✓	✓	✓	✓	✓	✓	✓
Public Transport																							
The provision and improvement of public transport services across the Cork sub-region should be promoted in partnership with Bus Eireann, Iarnrod Eireann and private operators. All the partners should embrace the concept of "total journey quality", to improve every stage of the public transport experience, from the initial enquiry the final walk to the destination, including the ride itself, the wait and the walk to the stop or station. It should also include an integrated ticketing system.	○	✓	✓	✓	✓	?	?	✓	?	?	✓	✓	○	○	○	○	○	○	○	○	○	○	✓

Key ○ No relationship or insignificant impact ✗ Significant adverse impact ? Uncertain ✓ Significant beneficial impact

Appendix D
Strategic Environmental Appraisal of The Proposed Plan

STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																					
	Economic		Social		Environmental					Balanced Spatial			Urban Renewal		Transport				Infra-structure			
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Green Routes																							
A network of Green Routes should be developed throughout Metropolitan Cork as priority routes for buses, cyclists and walkers.	○	✓	○	✓	✓	?	?	✓	?	?	○	○	✓	○	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commuter Rail																							
The authorities and CIE (or its successor) should develop an integrated, frequent service, rail network from Blarney to Midleton and Cobh, and an improved frequent service from Mallow (and Youghal in the longer term) via a redeveloped Kent Station, which should facilitate through running services and multi-modal interchange.	○	✓	○	✓	✓	?	?	✓	?	?	✓	✓	○	○	○	○	○	○	○	○	○	○	✓
Safeguarding Future Rail Corridors																							
Planning authorities should seek to identify potential corridors for light rail services and safeguard their alignment in the Development Plan.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	○	○	○	○	○
Modal Shift																							
Measures to achieve a shift from private car to alternative forms of transport should be encouraged and supported.	○	✓	○	✓	✓	?	✓	✓	○	○	✓	○	✓	○	✓	✓	✓	✓	✓	✓	○	✓	○
Multi-modal interchanges should be developed at Kent Station and the existing and proposed local stations, the airport and the proposed Park and Ride site at the Kinsale Road and Dunkettle Road Roundabout.	○	✓	✓	✓	✓	○	○	○	○	○	○	○	✓	○	○	✓	✓	✓	○	○	✓	✓	✓
Roads																							
There should be greater co-operation and liaison between the NRA and the authorities and the proposed road improvements integrated with the land use requirement.	○	✓	○	○	○	?	?	✓	?	?	○	○	○	○	○	○	○	○	○	✓	○	✓	✓
Facilities for pedestrians, cyclists and buses should be incorporated into the design of all road schemes. Road schemes should not preclude increasing the priority given to non-car users in the future.	○	○	○	✓	✓	○	○	✓	○	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓	✓
Commuter Plans																							
Consideration should be given to encouraging large employers and requiring new employers to prepare commuter plans.	○	○	✓	○	○	○	○	✓	○	○	○	○	✓	○	○	○	○	○	○	○	✓	○	○
Walking																							
Schemes to promote walking, enhance and improve the safety of the pedestrian environment and the walk links to public transport, should be of highest priority in the Green Routes Network for Metropolitan Cork, and in the local transport plans which should be prepared for individual towns.	○	✓	○	✓	✓	✓	✓	✓	✓	✓	✓	○	✓	○	✓	✓	✓	✓	✓	○	✓	✓	✓
Cycling																							
Measures should be provided to encourage cycling and improve safety for cyclists, including improved infrastructure, better integration with public transport, education, training and marketing. As part of their Commuter Plans, employers should provide on-site parking, showering and changing facilities for cyclists.	○	✓	○	✓	✓	?	✓	?	✓	✓	✓	○	✓	○	✓	✓	○	○	○	✓	✓	✓	✓
Motorcycles																							
Measures should be developed to facilitate and improve safety for motorcycles.	○	✓	○	✓	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓	✓
Parking																							
Parking supply, location and pricing for the City centre and other centres should be continuously updated as a car restraint mechanism, balanced with the needs for local economic vitality and viability, and the needs of local residents. Parking policy review should be included in local transport plans.	○	✓	○	○	○	○	○	✓	○	○	✓	○	✓	○	✓	✓	✓	✓	✓	○	✓	✓	✓

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STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																					
	Economic			Social		Environmental					Balanced Spatial				Urban Renewal			Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Port																							
The Port of Cork's Strategic Development Plan should be adopted, subject to on-going partnership with the Cork Area Strategic Plan, particularly with respect to:																							
– promotion of the Harbour and Docks area for leisure and amenity, and as a unique selling point for the Cork City region with regard to quality of life;	○	✓	✓	○	○	?	?	?	?	✓	○	○	○	○	○	✓	○	○	○	○	○	○	○
– co-ordination of the Docks redevelopment with the relocation of commercial port activities to Ringaskiddy, and other appropriate locations, and safeguarding the Ringaskiddy area for port development;	○	✓	✓	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓	✓	○	○	○	○	○
– co-ordination of port existing operations and future developments at Tivoli and Dunkettle with improvements to the railway. Haulage of freight by rail will be encouraged by the local authorities.	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	✓	○	✓	✓	✓	✓
Airport																							
Measures to improve the range and quality of air services at Cork Airport should be supported.	✓	✓	✓	○	○	?	?	?	?	○	○	○	○	○	○	○	○	✓	○	✓	○	✓	✓
Road and public transport access to the airport should be improved.	✓	✓	✓	○	○	?	?	?	?	○	○	○	○	○	○	○	○	✓	○	○	✓	✓	✓
Tourism																							
The planning authorities should encourage the provision of new tourist attractions and visitor accommodation in the Study Area in accordance with the local settlement policy	○	✓	✓	✓	○	?	?	?	?	○	✓	✓	○	✓	○	○	○	○	○	○	○	○	○
Urban renewal projects which contain a leisure component should be considered favourably.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓	✓	○	○	○	○	○	○
Activities to be supported in rural areas should include golf, equestrian centres, sea angling and inland fisheries.	○	✓	✓	✓	○	?	?	?	?	✓	✓	✓	○	✓	○	○	○	○	○	○	○	?	?
Proposals for tourist facilities should need to meet high standards of siting and design. Facilities must relate to the local policy for towns and villages. Facilities should not normally be permitted in environmentally sensitive areas.	○	○	○	○	○	✓	✓	?	✓	✓	○	○	○	○	○	○	○	○	○	○	○	○	○
Strategic Retail																							
In accordance with the Retail Planning Guidelines, the preferred locations for retail development should be town centres or, if there are no town centre sites available, the edge of town centres. Cork City centre is the key centre for major comparison goods shopping in the sub-region and major comparison shopping developments should be located within or on the edge of the City centre. Other retail development should be located in relation to public transport hubs and car parks so as to function as magnets creating pedestrian flow along key retail frontages.	○	✓	✓	✓	○	○	○	○	○	○	○	○	○	○	✓	✓	✓	✓	○	✓	✓	✓	✓
Waste Management, Reduction and Recycling																							
Cork County Council and Cork City Council are committed to implementing the joint waste management strategy and to fostering a society focused on waste reduction and the promotion of recycling.	○	○	○	○	○	?	○	✓	?	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Water Supply and Conservation																							
Cork County Council and Cork City Council is committed to the provision of an adequate potable water supply and the promotion of water conservation and responsible use.	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Sanitary Services																							
A strategic plan for the provision of sanitary services needs to be prepared to ensure the timely delivery of the necessary sanitary services for development.	○	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓
Development should not proceed unless the sanitary services made necessary by the development can be provided at the appropriate time.	○	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	✓	✓

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Appendix D
Strategic Environmental Appraisal of The Proposed Plan

STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																					
	Economic			Social		Environmental					Balanced Spatial			Urban Renewal		Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Energy																							
The HSE, Bord Gais Eireann and the local authorities should co-operate to ensure adequate provision of energy for Cork. Electricity and gas supply should be coordinated with the planning of other services for new developments. Renewable electricity initiatives should be encouraged as part of general planning policy.	☐	☐	☐	☐	☐	☐	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	✓	✓
Information and Telecommunications Technology																							
Information and Telecommunications Technology infrastructure, price, range and quality of service should be improved, for all sections of the community.	☐	☐	☐	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	✓	✓
Nature Conservation																							
The local authorities should seek to identify and protect additional areas of nature conservation interest, local designations and levels of protection.	☐	☐	☐	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
In granting planning consent, developers should be required to minimise their impact upon areas of existing and potential nature conservation importance and demonstrate that mitigation measures have been put into place.	☐	☐	☐	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Rivers																							
All watercourses in urban and rural areas should be protected and maintained in order to encourage ecological diversity, assist drainage and flood storage, and as recreational and landscaped areas.	☐	☐	☐	☐	☐	✓	✓	☐	✓	✓	✓	☐	☐	☐	☐	✓	☐	☐	☐	☐	☐	✓	✓
River corridor management areas should be developed to protect the aquatic environment.	☐	☐	☐	☐	☐	✓	✓	☐	✓	✓	✓	☐	☐	☐	☐	✓	☐	☐	☐	☐	☐	☐	☐
Landscape																							
A landscape character assessment of the Study Area should be undertaken in order to direct development to the least sensitive areas. In the interim, a review of existing landscape protection measures should be carried out, and consideration should be given to designating and protecting landscapes considered to be of international, national and regional importance. All new infrastructure should be sensitively and appropriately designed to fit into the landscape of the area through which it passes or in which it is located.	☐	☐	☐	☐	☐	?	✓	☐	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Built and Cultural Heritage																							
The architectural character and landscape setting of towns and villages should be protected. Substantial use should be made of new powers under the Planning and Development Act 2000 to designate conservation areas.	☐	☐	☐	☐	☐	☐	✓	✓	☐	☐	☐	✓	☐	☐	☐	✓	☐	☐	☐	☐	☐	✓	☐
Woodland and Forestry																							
The emphasis of new woodland planning in the Study Area should be on the native and broadleaved species in order to maximise nature conservation, landscape and recreational benefits. Encouragement should be given to the planting of deciduous woodlands close to new and expanded urban areas and in the greenbelt, for use also as recreational areas.	☐	☐	☐	☐	☐	✓	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Commercial forestry should not be permitted in environmentally sensitive areas as defined by the County Council.	☐	☐	☐	☐	☐	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Coastal Zone																							
The County Council should consider preparing a Coastal Zone Management Plan for the Study Area, drawing on lessons learned from the pioneering Bantry Bay Coast Zone Charter project and in accordance with emerging National Coastal Zone Management policies and best European Practice.	☐	☐	☐	☐	☐	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Development in the Coastal Zone should be limited to essential needs, for example fin fisheries and agriculture and any marine or boating developments should be located within or close to existing settlements. In all cases, any developments should be well sited to relate to the topography, landscape or townscape setting and meet the highest standards of design and materials.	☐	☐	☐	☐	☐	✓	✓	✓	✓	✓	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

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STRATEGIC GUIDANCE STATEMENT	Goals & Policy Objectives (Refer to Table 1.1)																						
	Economic			Social		Environmental					Raimcourt Spatial				Urban Renewal			Transport				Infra-structure	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Recreation																							
Existing sports and recreational facilities should be retained and enhanced and new facilities provided in all major developments.	○	○	○	○	✓	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○
Planning authorities should examine ways to improve access to the countryside for recreational purposes, such as walking, cycling and horseriding, and seek to provide new rights of way, slip-parking and car parking where necessary.	○	○	○	○	○	○	○	○	○	✓	○	○	○	○	○	○	○	○	○	○	○	○	○
Local planning authorities should have regard to the requirement to provide a recreational needs assessment, statement or proposals in applications involving groups of dwellings or housing developments.	○	○	○	○	?	○	○	○	○	✓	○	○	○	○	○	?	○	○	○	○	○	○	○

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APPENDIX E MEDIUM MIGRATION PROJECTION 1996-2021

	AGE	1996	2001	2006	2011	2016	2021	2026	2031	Headship Rate	Households 2021	CSO Activity Rate	Labour Force 2021
FEMALES	0	10,972	11,711	12,593	12,566	11,437	10,598	10,017	9,698				
	5	12,060	11,372	12,033	12,631	12,721	11,592	10,755	10,175				
	10	14,069	12,255	11,534	12,153	12,909	12,799	11,671	10,834				
	15	15,225	14,080	12,277	11,550	12,161	12,916	12,806	11,679	0.026	342	0.195	2,522
	20	13,072	15,700	14,475	12,571	11,741	12,351	13,105	12,995	0.144	1,780	0.666	8,231
	25	12,123	15,650	17,072	15,496	13,242	12,414	13,022	13,774	0.203	2,524	0.837	10,389
	30	12,382	14,216	17,354	16,331	16,320	14,073	13,247	13,654	0.216	3,046	0.776	10,921
	35	11,727	13,624	15,226	18,069	16,801	16,797	14,557	13,734	0.231	3,880	0.742	12,461
	40	10,620	12,330	14,106	15,567	18,262	16,991	16,997	14,767	0.234	4,438	0.712	13,514
	45	9,966	11,021	12,639	14,304	15,660	18,355	19,059	17,079	0.214	3,927	0.661	12,142
	50	8,336	10,061	11,074	12,629	14,237	15,576	18,238	18,933	0.225	3,507	0.582	9,069
	55	6,935	8,299	9,979	10,952	12,485	14,042	15,357	17,969	0.246	3,448	0.451	6,337
	60	6,165	6,830	8,146	9,756	10,899	12,168	13,697	14,973	0.309	3,765	0.210	2,559
	65	5,644	5,874	6,517	7,762	9,304	10,196	11,588	13,040	0.481	4,909	0.024	248
	70	5,226	5,124	5,361	5,951	7,103	8,504	9,315	10,580	0.481	4,095	0.024	207
	75+	8,994	9,407	9,683	10,107	10,941	12,390	14,406	16,256	0.481	5,965	0.024	301
	TOTAL	164,406	177,552	190,070	200,619	206,021	213,760	217,835	220,540				
MALES	0	11,573	12,316	13,246	13,221	12,035	11,153	10,541	10,415				
	5	12,855	11,940	12,625	13,460	13,359	12,181	11,296	10,691				
	10	14,466	13,011	12,072	12,715	13,509	13,414	12,243	11,363				
	15	15,801	14,430	12,987	12,048	12,683	13,481	13,391	12,228	0.014	187	0.238	3,209
	20	14,328	16,167	14,738	13,209	12,176	12,817	13,618	13,535	0.106	1,352	0.740	9,483
	25	11,909	15,887	17,424	15,663	13,798	12,785	13,430	14,234	0.373	4,775	0.929	11,876
	30	12,184	13,904	17,477	18,568	16,391	14,555	13,560	14,210	0.648	9,435	0.937	13,639
	35	11,427	13,304	14,812	18,087	18,911	16,773	14,966	13,989	0.759	12,729	0.942	15,900
	40	10,583	11,936	13,685	15,042	18,149	18,987	16,888	15,113	0.801	15,210	0.926	17,584
	45	10,071	10,883	12,142	13,766	15,011	18,096	18,943	16,893	0.831	15,038	0.891	16,131
	50	8,379	10,030	10,801	11,987	13,536	14,780	17,823	18,683	0.860	12,711	0.849	12,544
	55	6,941	8,186	9,770	10,494	11,624	13,152	14,362	17,367	0.874	11,489	0.700	9,206
	60	5,863	6,667	7,831	9,310	9,968	11,096	12,579	13,792	0.875	9,711	0.450	4,995
	65	5,043	5,402	6,120	7,184	8,540	9,205	10,261	11,678	0.819	7,544	0.120	1,104
	70	3,865	4,366	4,697	5,312	6,241	7,465	8,087	9,088	0.819	6,117	0.120	895
	75+	5,006	5,682	6,473	7,155	8,036	9,344	11,118	12,722	0.619	7,657	0.120	1,120
	TOTAL	160,324	174,111	186,900	197,219	203,985	209,283	213,123	215,979				
GRAND	TOTAL	324,730	351,663	376,970	397,838	410,006	423,043	430,958	436,519		189,881		306,458

APPENDIX F CENTRAL EMPLOYMENT PROJECTIONS

	1996	2000	2021	Change 2000-2021	% Change
Agriculture Forestry and Fishing	8299	7377	4464	-2914	-2.4%
Mining and Quarrying	303	313	224	-88	-1.6%
Food Industries	5346	5652	4385	-1266	-1.2%
Beverages and Tobacco	923	976	757	-219	-1.2%
Textiles and Clothing	1615	1667	1197	-471	-1.6%
Wood and Wood Products	2244	2317	1663	-654	-1.6%
Paper, Printing and Publishing	1343	1608	1549	-59	-0.2%
Chemicals,Rubber,Plastics	4732	6125	6943	819	0.6%
Glass,Pottery,Cement	837	864	620	-244	-1.6%
Metals and Engineering	9956	12884	14607	1722	0.6%
Other Mfr inc. transport	859	1029	991	-38	-0.2%
Utilities	1387	1279	1279	0	0.0%
Construction	9181	12891	14434	1543	0.5%
Wholesale Distribution	5575	7092	10078	2986	1.7%
Retail	15493	19708	28005	8298	1.7%
Finance and Business Services	5843	7322	11542	4220	2.2%
Transport & Communications	7189	9318	12658	3339	1.5%
Public Admin & Defence	7535	8253	12652	4400	2.1%
Education & Health	20713	23211	34430	11219	1.9%
Professional Services	4517	6908	10890	3982	2.2%
Personal Services	10433	13072	20607	7535	2.2%
Recreational Services	1838	2301	3627	1326	2.2%
Others not stated	2440	2899	3682	783	1.1%
Total	**128900**	**155100**	**201283**	**46219**	**1.3%**

Table G.1 Future Employment - City Proper

	Existing (Year 2000)	Total Year 2020	Growth to Year 2020
	Jobs	Jobs	Jobs
Central Cork	22,430	30,150	7,720
Northeast Cork	5,300	7,130	1,830
Northwest Cork	9,540	9,810	270
Southwest Cork	18,710	19,650	940
Southeast Cork	9,400	14,820	5,420
Total for City Proper	**65,380**	**81,560**	**16,180**

Table G.2 Future Employment – Metropolitan Cork

	Existing (Year 2000)	Total Year 2020	Growth to Year 2020
	No. Jobs	No. Jobs	No. Jobs
Midleton Town	2,960	8,370	5,320
Glounthaune / Little Island Carrigtwohill / Midleton hinterland	4,850	9,080	4,230
Cobh Town	4,160	5,600	1,440
Whitegate/Aghada	1,100	1,090	-10
Carrigaline / Ringaskiddy	4,010	8,430	4,420
Crosshaven & Myrtleville	2,150	2,260	110
South City Environs	12,340	14,100	1,760
Ballincollig & its hinterland	10,240	12,800	2,560
Blarney & its hinterland	6,530	11,410	4,880
Ballyvolane & Glanmire / Riverstown	4,240	5,660	1,420
Total for Metropolitan Cork	**52,580**	**78,750**	**26,170**

Appendix G
Projections for Population, Households, Dwellings & Employment

Table G.3
Spatial Distribution of Future Employment - Ring Towns and Rural Areas

	Current (Year 2000) No. of Jobs	Year 2020 No. of Jobs	Growth to Year 2020 No. of Jobs
Youghal hinterland	3,940	3,720	-220
Youghal Town	2,570	3,360	790
Kinsale hinterland	2,000	1,830	-170
Kinsale Town	2,070	2,100	30
Bandon hinterland	4,000	3,530	-470
Bandon Town	3,200	3,590	390
Macroom hinterland	4,020	3,540	-480
Macroom Town	1,110	1,710	600
Mallow hinterland	3,910	4,150	240
Mallow Town	3,510	6,070	2,560
Fermoy hinterland	4,540	4,230	-310
Fermoy Town	2,170	3,230	1,060
Total for Ring Towns & Rural	**37,040**	**41,060**	**4,020**

Table G.4
Spatial Distribution of Future Population and Households - City Proper

	Existing (Year 2000) Population	Households	Total Year 2020 Population	Households	Growth to Year 2020 Population	Households	Dwellings
Central Cork	7,350	2,970	9,420	3,570	2,070	600	700
Northeast Cork	23,290	7,860	26,030	9,860	2,740	2,000	2,390
Northwest Cork	27,510	9,010	27,220	10,310	-290	1,300	1,670
Southwest Cork	40,230	13,990	37,720	14,290	-2,510	300	760
Southeast Cork	25,430	8,490	35,430	13,420	10,000	4,930	5,460
Total for City Proper	**123,810**	**42,320**	**135,820**	**51,450**	**12,010**	**9,130**	**11,090**

Table G.5
Spatial Distribution of Future Population and Households - Metropolitan Cork

	Existing (Year 2000)		Total Year 2020		Growth to Year 2020		
	Pop.	Households	Pop.	Households	Pop.	Households	Dwellings
Midleton Town	8,660	2,860	21,010	7,360	12,350	5,300	5,740
Glounthaune & Little Island	4,940	1,520	5,340	1,920	400	300	380
Carrigtwohill & Midleton Hinterland	5,850	2,050	17,220	6,730	10,570	4,680	5,090
Cobh Town	11,110	3,520	14,570	5,520	3,460	2,000	2,260
Whitegate/Aghada	2,280	670	2,200	830	-80	160	190
Carrigaline & Ringaskiddy	10,280	3,210	14,280	5,410	4,000	2,200	2,490
Crosshaven/ Myrtleville	3,030	970	4,010	1,520	980	550	630
Carrigaline hinterland	3,170	1,040	3,140	1,190	-30	150	200
Douglas and S. City Env.	22,630	7,250	25,220	9,550	2,390	2,300	2,700
Monkstown & Passage	4,760	1,520	5,740	2,170	960	650	760
Ballincollig & its hinterland	23,210	6,870	28,050	9,870	2,840	3,000	3,450
Monard/Rathpeacon/ Whitechurch[1]	1,800	530	14,870	5,630	13,070	5,100	5,380
Blarney and its hinterland	14,630	4,290	14,720	5,560	90	1,290	1,550
Glanmire/Riverstown	4,140	1,110	5,110	1,940	970	830	930
Ballyvolane	6,190	1,740	7,230	2,740	1,040	1,000	1,120
Total for Metropolitan Cork	**127,700**	**38,950**	**180,710**	**68,460**	**53,010**	**29,510**	**32,870**

1 Total of 5,000 proposed dwellings in Monard/Rathpeacon remainder mainly committed development in Whitechurch will dispersed.

Table G.6
Spatial Distribution of Future Population & Households – Ring Towns & Rural Areas

	Existing (Year 2000)		Total Year 2020		Growth to Year 2020		
	Pop.	Households	Pop.	Households	Pop.	Households	Dwellings
Youghal hinterland	9,220	2,870	9,410	3,570	190	700	840
Youghal Town	7,230	2,400	9,650	3,660	2,420	1,260	1,410
Kinsale hinterland	5,190	1,550	4,730	1,790	-460	240	300
Kinsale Town	5,210	1,800	5,190	1,970	-20	170	230
Bandon Hinterland	9,480	2,790	8,100	3,070	-1,380	280	390
Bandon Town	6,490	2,760	9,460	3,590	1,000	830	970
Macroom hinterland	9,500	2,900	8,330	3,160	-1,170	260	360
Macroom Town	3,010	1,010	5,080	1,930	2,070	920	1010
Mallow hinterland	9,080	2,730	8,970	3,400	-110	670	800
Mallow Town	9,920	3,410	17,430	6,610	7,510	3,200	3,510
Fermoy hinterland	11,090	3,470	10,860	4,120	-230	650	810
Fermoy Town	6,200	2,060	9,410	3,570	3,210	1,510	1,680
Total Areas for Ring Towns & Rural	**93,590**	**29,750**	**106,620**	**40,440**	**13,030**	**10,690**	**12,310**

Appendix G
Projections for Population, Households, Dwellings & Employment

Figure G.1 Growth in Number of Households – City Proper

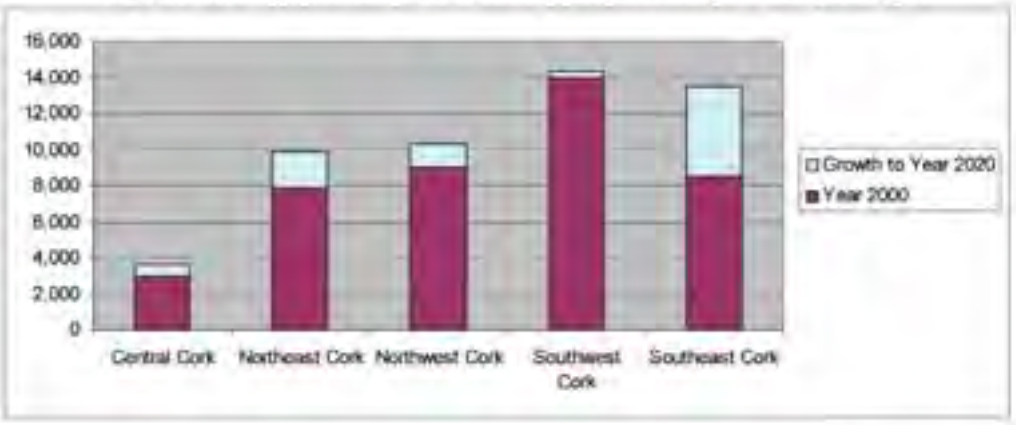


Figure G.2 Growth in Households – Metropolitan Cork

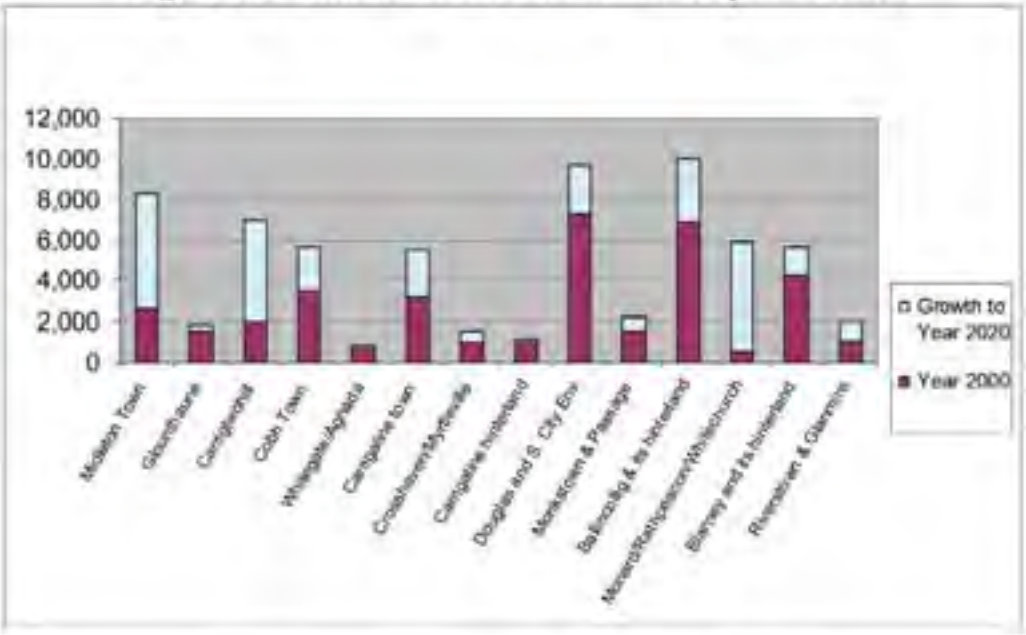
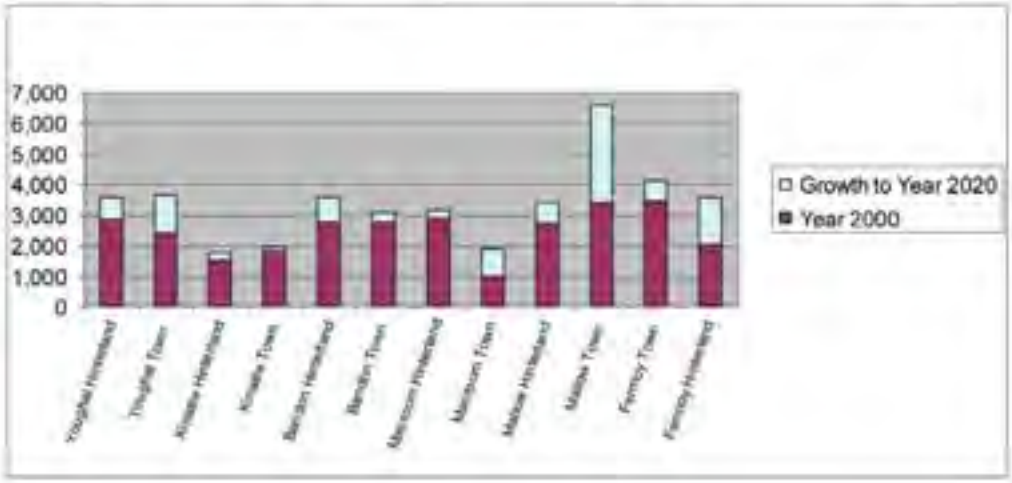


Figure G.3 Growth in Number of Households – Ring Towns and Rural Areas



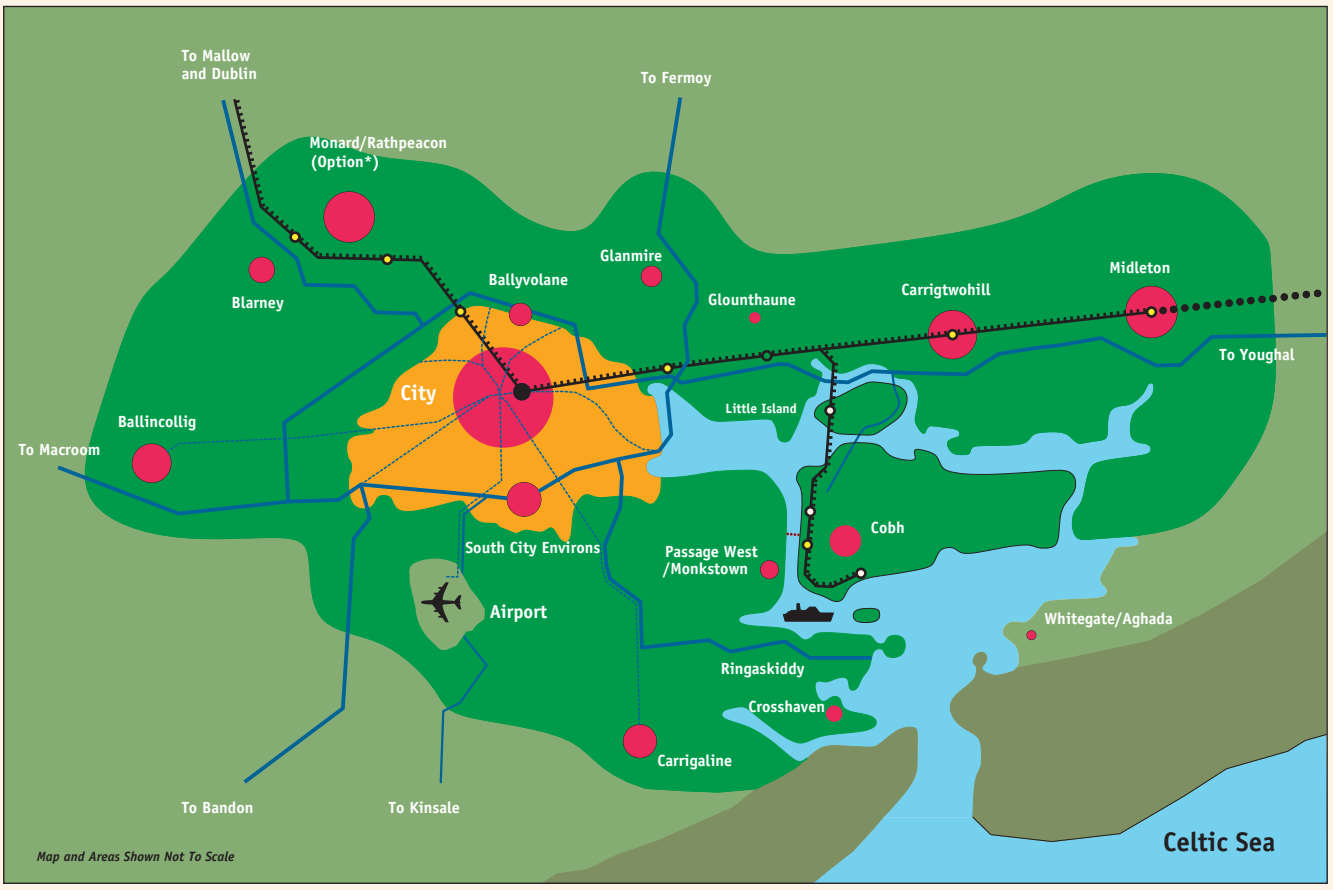
Legend

- Railway
- Potential Railway
- Future Railway Station
- Existing Railway Station
- Quality Bus
- Major Roads
- Minor Roads
- Park + Ride
- Future Employment Centre
- Existing Employment Centre
- Kent Station Interchange
- Port of Cork
- Cork Airport
- Rural Conservation Zone
- Coastal Protection Zone
- Green Belt
- Location of New Dwellings

This plan is NOT intended to be site specific and indicates possible broad locations for future development.

*Location of development will depend upon detailed rail corridor study

Figure G.4 **Location of New Dwellings: Metropolitan Cork**



Appendix H
List of Proposed Road Improvements

Road Network Capacity Constraints	Proposed Improvement (by local authority/NRA)	Status
N25 Youghal	By-pass	At construction stage, possible opening 2003
N25 Killeagh	No scheme proposed	Preliminary stage
N25 Castlemartyr	No scheme proposed	Preliminary stage
N8 Mitchelstown	Bypass	At design stage, possible opening 2006
N8 Fermoy	Bypass	At design stage, possible opening 2005
N8 Rathcormack	Bypass	At design stage, possible opening 2005
N8 Watergrasshill	Bypass	At construction stage, possible opening 2003
N22 Ballincollig	Bypass	At construction stage, possible opening 2003
N22 Macroom	Relief road	Feasibility study for N22 from Ballincollig bypass to Ballyvourney due to start soon.
N71 Bandon	Southern Relief Road. No scheme for western relief road / second bridge	Sections ready for opening. Scheme completion 2001/02 pending land purchase.
N71 Inishannon	No scheme proposed	Previous plans need re-appraisal. No firm plan as yet.
N20 Blackpool	Bypass	Opened 2001
N25 Kinsale Road Roundabout	Bypass	At design stage, possible opening 2003
N25 Sarsfield Road Roundabout	Bypass	At design stage, possible opening 2004
Shanakiel / Sundays Well	Northern Ring Road	2005/7
Wilton Road	Northern Ring Road	2005/7
Douglas Village	Traffic Signals	2002
City Centre	Traffic Management, pedestrian environment	2002 + on-going
Douglas – South West Route	Road improvement	Preliminary stage
Ballygarvan-Fivemilebridge	Ballygarvan bypass	Preliminary stage
N28 south of Ring Road	Widening, possible dualling to Carrigaline.	Preliminary stage
Blarney	Inner Relief Road	At design stage, possible opening 2002

Appendix I
Discussion of Rail and Bus-based Public Transport

Rail Based Systems
The terms tram and light rail are often used interchangeably, but generally trams run predominantly on-street and light rail is more segregated. Both offer high capacity units, a good image, smooth ride and are, to some extent, self-enforcing from obstructive cars. They are electronically powered, so they are locally emission-free. On the downside, the need to interchange onto the tram corridor from other (bus) services is unattractive; there is little scope for incremental development and buses cannot run on the track. Trams must often work with other traffic which can lead to delays and reduced reliability. There are many examples of street-running trams throughout Europe. Some of the more recent schemes are in the UK including the Sheffield Super Tram, the Manchester Metrolink and the Croydon Light Railway, which run on former railway lines with on street running in the city centre. In Dublin, the Luas, an on-street system, is currently under construction. The cost of trackwork for trams is in the order of €20.3 million/km for trackwork, including utilities diversion and land acquisition. Tram or light rail vehicles cost around €2.5 million each.

Bus-Based Systems
Many measures can be combined with the flexibility of the bus to capture many of the advantages that are normally associated with railways. These could include a range and combination of bus priority measures which can be accompanied by increased frequencies and a package of measures to update the image of a bus service, for example at-stop and on-bus information, accessible low-floor vehicles, improved ticketing and fare collection.

Problems of enforcement are the main disadvantage of conventional priority measures. The most cost-effective physical solution is the **Segregated Busway**. This is a bus lane with kerbs to separate the lane from the rest of the road. Any buses can use the busway without special equipment. Costs of implementation of segregated busways are estimated at some €1.9 million/km, plus the cost of any additional priority measures. Buses cost under €254,000 each.

Guided Busways are narrower than segregated busways because the vehicles are guided, allowing vehicles to line up at stops easily, produce a smooth ride and high running speeds in restricted corridors. The most common guided busways have a concrete track bed with guide kerbs. Vehicles are fitted with guide-wheels which then run guided by the kerbs when the bus is in the guideway. Systems of electronic or "wire" guidance are also under development, which remove the need for a special wheel attachment. The vehicles can also run in conventional non-guided mode elsewhere on the network. Examples are found in Adelaide and Essen. There are also short stretches in Birmingham and Ipswich. The city of Leeds has some operational sections of guideway with others under construction. A major guided bus system for Edinburgh is currently under construction (City of Edinburgh Rapid Transit - CERT) as a public-private sector partnership. A major advantage of guided busways is the scope for incremental implementation and that they allow services to join or leave at various points, reducing the need for interchange. Guided busways may be more expensive than busways, depending on the diversion of utilities.

Recently, there has been significant progress in the development of low-emission diesel fuels and engines for buses; however, buses can also use electric power or alternative fuels such as battery, compressed natural gas (CNG), liquefied petroleum gas (LPG) and Biodiesel.

Comparison of Rail and Bus-Based Systems
Costs arise from the provision of fixed infrastructure, vehicles and operating costs (fuel staff, and maintenance). Each system has different overall cost levels, but also a different balance between the elements. For example, light rail has relatively high fixed costs, as the track and vehicles are expensive; however, operating costs are relatively low as the large vehicles and low frequencies can provide the same capacity as a high frequency bus service. It follows that light rail is only likely to be more economical than bus-based modes where demand levels are comparatively high.

There is a broad optimum cost and capacity range which is most suited to each system; however, these ranges are not mutually exclusive of other modes and there are overlaps between them. Conventional bus services are most suitable in satisfying lower demand volumes. Services can be increased to cater for up to about 7,000 passengers/hour. Guided bus and trolley bus options may be appropriate to cater for around 2,000 - 7,000 passengers/hour. The minimum flow in this range would be need to be around 2,000 passengers/hour to justify the case of initial investment in fixed infrastructure. Light-rail or street-running trams could be considered where a minimum capacity of 3,500 - 5,000 passengers/hour is required.

Image
Local public transport must become more attractive to encourage a modal transfer from the private car. This requires a great improvement in the quality of the public transport product. Some elements of service quality are captured in the total journey time analysis. Other elements include the quality of the vehicles; the information system; ease of interchange; greater accessibility for people with

Appendix I
Discussion of Rail and Bus-based Public Transport

mobility difficulties; and the physical infrastructure itself, which should give the impression of permanence and reliability. It is not clear which characteristics are valued most highly by the various stakeholders in any system (current and potential passengers, developers of sites along the route, operators). Research in the UK and Europe has shown that passengers much prefer light rail to bus services, equivalent to about 8 minutes of journey time saving per passenger. However, the generally poor bus service in these examples does not allow a like-for-like comparison to be made. Enhancing the quality of the bus service would do much to close this perception gap. The introduction of Quality Bus Corridors in Dublin is an successful example of how this can be done will relatively little infrastructure investment.

Goal 1 Economic Growth	Create a highly competitive quality location so as to facilitate the growth of an innovative and advanced (but balanced and robust) economy		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To promote an innovative, advanced, high value-added and high wage economy.	New developments would gain by existing environment of innovation in the south and west of the City.	Could be successful if public sector took a strong lead.	Mobile investment may find the conditions (small labour markets, poor agglomeration and clustering etc.) unattractive.
To retain a robust, well balanced economic structure.	Would reinforce the strong position of the south, consisting of 'academic wedge', airport, port and the Cobh/harbour area.	Would balance growth evenly in the Greater Cork area.	May undermine City's role as economic engine.
To create an internationally oriented and highly competitive location and remove obstacles to private-sector investment and activity.	Is playing to the identified strengths; 'going with the grain of the market'. Would release the quality of life potential of Kinsale and West Cork.	'Going against the grain of the market'; might be less attractive to investors in the short term.	Could succeed with small or medium sized firms in less advanced sectors.

Goal 2 Social Inclusion	Promote social inclusion (especially within the Greater City) by improving access to public transport, education and jobs.		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To create access to employment opportunities for the most disadvantaged members of the community.	Does little to specifically deliver benefits to deprived areas.	Would deliver the best access to most jobs for the most deprived areas, would create more employment in or near deprived areas.	Would not generate urban employment growth to same extent as other alternatives, and therefore would not help the most deprived areas.
To improve access to facilities and services, including education, health, community services and utilities.	Enables relatively efficient provision of public transport improving access to opportunities.	Enables cost-effective provision of high quality public transport improving access to opportunities.	Services would be costly to provide in the dispersed settlements and access would be car dependent.

Appendix J
Goals Achievement Matrix For Alternative Strategies

Goal 3 Environment	Enhance the environmental quality and landscape setting of the Cork sub-region, minimise impacts on ecologically sensitive areas and on built heritage and cultural landscapes		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To minimise impact on ecologically sensitive areas. **To minimise impact to cultural heritage, character and setting of the City, towns and villages.** **To promote the sustainable use of resources.** **To minimise the effects on rural landscape character.** **To ensure ready access to open space and natural landscape.**	The greenbelt south of the City would be greatly affected, but countryside north and east of the City would not. Impact on the coastal zone might be significant, but the finest landscape could be conserved. May negatively impact on City by reinforcing current patterns of decline. Moderate effect in promoting transfer to sustainable transport. Highest levels of congestion so most likely to affect air quality. Would minimise the loss and fragmentation of agricultural land through higher/concentrated development. Growth would be contained in specific settlements. The policy of high gross/low net density allows creation of open space within urban areas and protects greenbelt and sensitive areas.	The greenbelt on the northern side of the City would be considerably affected, but there would be a lower relative threat to the southern greenbelt and coastal zone. Could reinforce the cultural heritage of the City. Allows for limited growth in towns and villages. Most likely to transfer travel to sustainable modes. Would minimise the loss and fragmentation of agricultural land. Growth would be contained in specific settlements, but development at Blarney could be visually exposed and impact on its setting. Policy of high gross/low net densities would allow for creation of open space within urban areas to a greater extent than A.	A careful Settlement policy would be required to minimise impact. Threat to City. Large growth in towns and villages needs careful management to minimise impact. Car dependent, will reduce viability of sustainable modes, traffic flows on rural roads will increase. Dispersal may lead to a higher loss and fragmentation of agricultural land. Reduction in isolation and increase in number of buildings may spoil the rural character. Dispersed growth allows local access to rural areas.

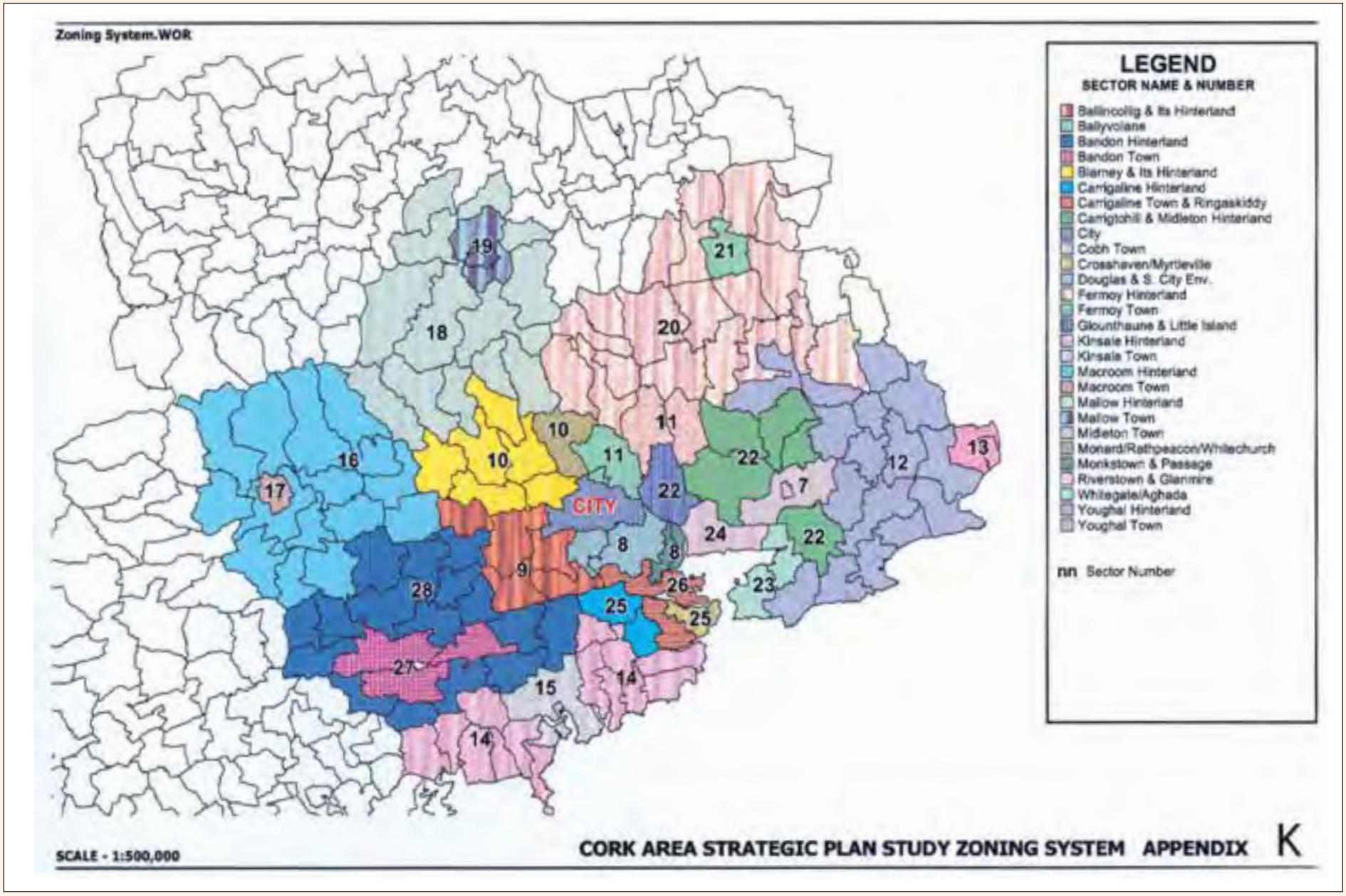
Goal 4 Balanced Spatial Development	Include the City, its satellites, Ring Towns and rural settlements as part of a balanced settlement system with all levels of development in accordance with varying economic potential		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To deliver equivalent benefits to the entire territory. To locate economic activity appropriate to smaller settlements or centres in them. To avoid excessive routine car commuting To create a polycentric location pattern within Greater Cork	Growth biased in favour of the southern arc. Large scale development in small settlements would be avoided and economic potential of City is released by playing to the market. Limited provision of housing in outer areas will reduce demand for long distance commuting. Cork City would be the dominant centre.	Optimises release of aggregate economic potential of the City and study area, by creating the best conditions for strong growth of the centre, and entails development of the northern and eastern Ring Towns, particularly Mallow and Youghal corridor. Large scale developments in small settlements would be avoided Limited provision of housing in outer areas will avoid long distance commuting. Rail system will allow non-car commuting. Cork City would be the dominant centre.	Delivers the greatest spread of development Smaller settlements may receive substantial development. Will generate considerable commuting by car within the outer areas but less so to the City centre. Should allow a Settlement Policy to deliver high levels of service access parity.

Goal 5 Urban Renewal	Recognise the City as the heart of the sub-region. Promote a high level of economic activity in the City centre and ensure that the housing stock and urban services retain their attractiveness in general balance with the suburbs. Synthesise urban renewal with conservation of historic form and character.		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To promote the City centre as the major area of comparison shopping, services and culture in the region. To promote regeneration of run-down urban areas. To provide high quality public transport to reinforce the role of the City centre.	Would allow for creation of new offices and retail, or the renewal of housing stock, environmental upgrading and conservation. All of the City would benefit from increased economic activity, but regeneration would not be addressed directly. A high quality public transport system is proposed.	Would allow for creation of new offices and retail and creates the most potential for car exclusion and improved amenity and quality of environment Urban regeneration and housing stock improvements would be directly addressed. Maximises accessibility to the City core by public transport.	May encourage suburban development, undermining the inner City but will strengthen the larger Ring Towns. Could convert the City centre into a speciality centre and high density quality housing area. Dispersal of population makes less public transport efficient and consequently less viable.

Appendix J
Goals Achievement Matrix For Alternative Strategies

Goal 6 Transportation	Maximise the use of fully accessible public transport by co-ordinating building form, use and density with high quality bus and train services as well as regulating cars and other traffic. Promote walking by improving the pedestrian environment		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To ensure the provision of a well functioning, integrated public transport system. To ensure the provision of a defined standard of the public transport, at reasonable cost. To ensure the timely and cost effective delivery of the accelerated investment in infrastructure. To reduce car dependency.	Supports the provision of an integrated urban transport system by intensifying demand. Unbalanced demand will create high level of competition for road space in the south while contributing least to the viability of the suburban rail network. In the north and east, the proposed rail service would run every 30 minutes between Mallow, Youghal, Cobh and Cork. To the south and west, a high-quality, high-frequency, bus based system is proposed. Demand for this south and west system is greatest with Strategy A. Revenues on both parts of the system are expected to cover operating costs in the long term. Although the entire integrated system is critical, Strategy A is more dependent on the success of the south and west public transport system, however, delivery of a highly reliable service will be challenged as a dedicated, segregated route is not currently available. Proposes a concentrated settlement pattern which, in conjunction with the proposed public transport system and car restraint measures, will reduce car dependency.	Strongly supports the provision of an integrated rail, bus and road system to serve the urban area, with strong links to/from the Ring Towns, with a strong focus on the rail corridor. Demand for rail services would be greatest, and the proposed rail service would run every 15 minutes between Mallow, Youghal, Cobh and Cork. To the south and west, a high-quality, high-frequency bus based system is proposed. Although this strategy needs the entire integrated transport system to be implemented, it is more dependent on the success of the rail service. As the alignment currently exists and feasibility studies have been undertaken already, the rail service can be implemented relatively quickly. Proposes a concentrated settlement pattern which, in conjunction with the proposed public transport system and car restraint measures, will reduce car dependency, probably to a greater extent than A as more people will have the choice of rail.	Provides weaker support to the integrated transport proposals by dispersing development to the outer areas - although this has some efficiencies in use of road space for private vehicles. To the south and west, a high-quality, high-frequency bus based system is proposed. In the north and east, the proposed rail service would run every 30 minutes between Mallow, Cobh and Cork, and this strategy supports extension of service to Youghal. The success of C in the urban areas depends on the implementation of the entire integrated transport system, with a slight bias towards the rail system; however it places more development in the outer rural areas which will be largely independent of the public transport system and will not help its viability. Proposes a dispersed settlement pattern and access to homes and jobs in the outer areas is likely to remain largely car dependent.

Goal 7 Infrastructure	Minimise the cost of providing water, sewerage, electricity, gas and telecommunications services to the population		
Policy Objectives	**Alternative A**	**Alternative B**	**Alternative C**
To maximise the use of existing infrastructure. Minimise the cost of new service provision.	Good use of committed infrastructure. Infrastructure can be provided reasonably economically in new growth areas.	Good use of committed infrastructure. Infrastructure can be provided reasonably economically in new growth areas.	Good use of committed infrastructure. Will require more extensive investment in new services in the rural areas.


Zoning System.WOR
LEGEND
SECTOR NAME & NUMBER
Ballincollig & Its Hinterland
Ballyvolane
Bandon Hinterland
Bandon Town
Blarney & Its Hinterland
Carrigaline Hinterland
Carrigaline Town & Ringaskiddy
Carrigtohill & Midleton Hinterland
City
Cobh Town
Crosshaven/Myrtleville
Douglas & S. City Env.
Fermoy Hinterland
Fermoy Town
Glounthaune & Little Island
Kinsale Hinterland
Kinsale Town
Macroom Hinterland
Macroom Town
Mallow Hinterland
Mallow Town
Midleton Town
Monard/Rathpeacon/Whitechurch
Monkstown & Passage
Riverstown & Glanmire
Whitegate/Aghada
Youghal Hinterland
Youghal Town
nn Sector Number
CITY
SCALE - 1:500,000
CORK AREA STRATEGIC PLAN STUDY ZONING SYSTEM APPENDIX K

Appendix L
Green Routes Network

Proposed Green Routes

Green Route	Serving
Dismantled railway	Blackrock, Ballintemple, Mahon
South City Link	Kinsale Road Park and Ride, City
	Buses only
Bishopstown	Ballincollig, Bishopstown, Bandon, Macroom
	Services to West Cork and Kerry
	Bandon Road Roundabout Park and Ride
Douglas via South	Grange, Donnybrook, Ballyphehane, Carrigaline, Monkstown
Douglas Road	
Douglas via Main	Donnybrook, Carrigaline, Monkstown, Passage West, Crosshaven, Ringaskiddy
Douglas Road	Mayfield, Ballyvolane, Glenthirn, Carrignava,Glenville
Mayfield	Farranree, Blarney, Tower, Cloghroe, Newmarket, Mallow, Buttevant
Farranree/ Blackpool	
Knocknaheeny/	Knocknaheeny, Holyhill, Gurranabraher
Gurranbraher	
N22	Ballincollig, Macroom
Kinsale Road/ South City	Kinsale, Ballinhassig, Airport
Link	Kinsale Road Roundabout

Green Routes: Scheme Checklist

Category	Possible Measures
Dedicated space for buses on wider streets	With flow bus lanes Contraflow bus lanes Segregated busways Guided bus ways
Creating space on narrow streets	Parking and loading restrictions Queue relocation Kerb & bus stop treatment to prevent overtaking of bus & reduce dwell times at stops Reduction in traffic flow (banned turns, no entries) Closure or partial closure to cars Bus only/limited access streets Bus "gates"
ITS applications	Priority for buses within UTC systems Enforcement of bus lanes Realtime information at bus-stops and elsewhere Realtime information on Internet
Junction treatments	Parking and loading restrictions Banned turns Local widening Lane re-configuration Signals with priority for buses and/or cyclists Pedestrian crossings Advances stoplines for cyclists Conversion of roundabouts and priority junctions to signals in urban areas
Waiting environment	Safety and security Lighting Shelter Information Integrated with other activities (eg. Shops, cafes)
Cycle facilities	Cycle tracks Crossing facilities Facilities at difficult junctions Parking for cycles Parking and loading restrictions
Pedestrian network and bus stop access	Crossings Footpaths Lighting Locating bus stops with other activities Parking and loading restrictions Bus boarders Correct kerbing Off-bus ticketing

Appendix M
Serviced Land Availability And Existing Planning Situation

Metropolitan Cork

Location	Number of Potential Zoned Serviced Units 2000–2006	No. Units with Planning Consent, pending or at inquiry or negotiations
Ballincollig	3,400	1,450
South City Environs	2,360	2,360
Passage West / Monkstown	730	600
Crosshaven / Myrtleville	370	240
Ballyvolane / Glanmire	1,150	720
Carrigaline / Ringaskiddy	2,660	1,010
Carrigtwohill	1,140	710
Whitegate / Aghada	980	150
Cobh	1,240	1,200
Glounthaune	130	70
Monard / North City Environs / Blarney	950	470
Midleton	2,630	1,180
Other settlements	860	500
Total Greater Cork	18,600	10,660

Source: Figures derived from Cork County Council Housing Yield, 31st December 1999 (all figures rounded).

Ring Towns and Rural Settlements

Location	Number of Potential Zoned Serviced Units 2000-2006	No. Units with Planning Permission or consent pending
Mallow & Hinterland	1,040	570
Fermoy & Hinterland	2,630	460
Youghal & Hinterland	3,150	660
Bandon & Hinterland	1,220	270
Macroom & Hinterland	430	340
Kinsale & Hinterland	440	130
Total Ring Towns & Rural Hinterlands	**8,910**	**2,430**

Source: Cork County Council Housing Yield, December 1999 & UDC Housing Yield Submissions to DELG

Phasing

Tranche 1

Skills and Resources

To put in place the transport strategy, and manage it, the two local authorities, Iarnrod Éireann and Bus Éireann, will need to continue to expand their resources and skills base to deal with transport in an increasingly congested urban environment. Specific skills needed will include: traffic signal design operation and maintenance; parking control and enforcement; traffic calming; and planning for cyclists, buses and pedestrians.

Public Education

A public education campaign to explain the transport strategy should be initiated.

Rail

Killbarry Station should be opened, and the rail line to Midleton with all intermediate stations. Dedicated Park and Ride facilities should be provided either at a new station in the Tivoli/Dunkettle area or at Little Island Station. The local bus network should be restructured and expanded to complement the railway, and to avoid giving direct competition (subject to future Government policy on competition and the restructuring of CIÉ).

The redevelopment of Kent Station, including interchange facilities

Planning should take place for the Blarney/Monard Parkway and Monard/Rathpeacon stations, integrated with the development proposals.

Bus and Green Routes

The Kinsale Road Roundabout and Bandon Road Roundabout Park and Ride sites should be introduced with dedicated, branded high speed bus services to the City and Kent Station. Priority measures along the routes should be incrementally planned and introduced. Higher priority should be given as congestion builds up. Planning should begin for a segregated guideway on the South Link Road.

All the Green Routes should be progressed, starting with the Bishopstown Route which will also serve the Bandon Road Park and Ride bus.

A "total journey quality" ethos should be embraced and publicised as part of the Green Routes initiative. New travel information systems should be put in place. The European Development Fund sponsored ASPECT project, managed by the South West Regional Authority, is researching relationships between spatial planning and emerging information and communications technology. SWRA has expressed interest in developing funding a demonstration project on this issue for the Cork Strategic Plan area (The North and West County Cork Strategic Plan area could also be included).

Roads

Feasibility studies should be undertaken for the Northern Ring Road/distributor road and the proposed bridges over the River Lee. This should include detailed junction modelling and the expansion of the simulation area of the Cork Traffic Model.

Traffic Restraint

Car restraint in the City centre should be tackled increasing parking charges. An increase of between €1.3 and €3.8 is assumed for Tranche 1 (2000 prices), and selectively reduced access for cars. It is important that car restraint measures are seen to be part of an overall package that includes the rail, Green Routes, Park and Ride and the improved pedestrian environment. Car dependency should also be tackled by alternative methods of reducing car travel demand such as Commuter Plans and Car Sharing.

Cycling

A cycling initiative should be introduced in the City, directed by a dedicated cycling officer.

Local Transport Plans

Local transport plans should be prepared for Douglas, Bishopstown, Carrigaline/Ringaskiddy, Ballincollig, Carrigtwohill, Kinsale, Bandon, Macroom and Youghal.

Updating of Traffic Model

The traffic model should be updated on a regular basis as each new census on travel patterns becomes available. This would help to monitor the progress of the key elements of the Strategic Plan. The updating process would also require collection of data on travel patterns such as traffic surveys, bus and rail patronage surveys etc. The next census year being 2001 means that the planning and implementation of such surveys needs to be considered in the very near future.

Tranche 2

- he frequency of rail services should be increased. The Blarney/Monard and Monard/Rathpeacon railway stations should be opened.
- Midleton station should be closely monitored for signs of use as Park and Ride from Youghal. Road travel times from Youghal should also be monitored. Forecasts for the rail section to Youghal should be updated and plans made accordingly.
- The Park and Ride service from Carrigaline should be introduced, running either via the Douglas Green Routes or the South City Link.

Appendix N
Transportation Phasing And Costs

The Kinsale Road Roundabout Park and Ride site will be under pressure and will need to be expanded and/or alternative, additional sites opened.

- A second phase of priority measures should be introduced on the Green Routes to compensate buses for increasing journey times due to congestion.
- The Northern Ring Road should be developed.
- A bridge over the River Lee should be built to facilitate the development of the Docks. This will also ease congestion along Horgans Quay.
- A further increase in parking charges should be introduced (an additional €1.3 - €3.8 year (2000 prices) over the Tranche 1 charge).
- Traffic calming should be introduced in residential roads in areas adjacent to the City centre to discourage "rat running" as the main routes into the City become increasingly congested.
- Local transport plans should be prepared for Midleton, Mallow, Fermoy and the Monard development. Previous local transport plans should be updated.
- The Transport Model should be updated based on the 2006 Census, and again after the 2011 census.

Tranche 3 (Year 2013 to 2020)

- The performance of the railway should be monitored and services increased as required.
- A third phase of bus priority measures should be introduced on the Green Routes. This should include a guideway on the South Link Road.
- A second bridge across the River Lee to ease congestion along Hogans Quay and encourage the redevelopment of the docks should be considered.
- Traffic calming should be extended to most residential roads within 2-3 miles of the City centre to discourage rat running as the main routes into the City become severely congested.
- All local transport plans should be updated.
- The Transport Model should be updated based on the 2016 census.

Cost Estimates

Indicative budgets for the transportation projects are provided in Tables N.1 to N.4. Cost estimates will need to be refined following more detailed feasibility studies which will need to be undertaken when the Plan is adopted.

Table N.1

RAIL CAPITAL COST ESTIMATES

Cork / Mallow Line	**€ millions (2000 prices)**
Blarney / Monard Station	7.40
Monard / Rathpeacon Station	3.60
Kilbarry Station	3.60
Permanent Way	0.60
Signalling	0.95
Subtotal (Cork / Mallow)	**16.05**
Kent Station Redevelopment	**35.20**
Major Platform Realignment and Re-signalling / Platform works	
Depot for additional rolling stock	3.80
Kent Station to Cobh Line	
"East City" station with Park and Ride (1000 spaces)	9.90
Ballynoe Station	3.00
Signalling	6.10
Subtotal (Cork / Cobh Line)	**19.00**
Glounthaune to Midleton Line	
Carrigtwohill Station	7.00
Midleton Station	7.00
Permanent Way	15.60
Signalling	4.80
Subtotal Glounthaune to Midleton	**34.40**
Total Infrastructure Capital Costs (Including Kent Station)	**108.50**
Rolling Stock (10 new 2 car DMU sets)	**25.40**

Note:
No allowance is provided for additional land that may need to be acquired. Land take requirements must be assessed as part of future feasibility studies.

Appendix N
Transportation Phasing And Costs

Table N.2

INDICATIVE COST ESTIMATE FOR GREEN ROUTES/QBCS/TRAFFIC IMPROVEMENTS

Section	Approximate length of congested section (km)	Cost (€ million, 2000 prices)			
		Tranche 1	Tranche 2	Tranche 3	TOTAL
Bishopstown	5	3.8			3.8
N22 along Carrigrohane Road	6	2.3	2.3		4.6
Blackpool	4	1.5	1.5		3.0
Mayfield	5	1.9	1.9		3.8
Gurranabraher	3	2.3			2.3
Douglas (both routes)	10	3.8	3.8		7.6
South City Link	4	2.0		5.8	7.8
Mahon disused railway	-	0.9			0.9
Sub-total Green Routes		**15.5**	**11.5**	**5.8**	**33**
Traffic Calming and Local Env. Improvements		19.0	19.0	19.0	57
City Centre Pedestrian Env. Improvements		7.6	8.9	8.9	25.4
City Centre Urban Traffic Control		3.8	8.9	4.4	17.1
Kinsale Road Park and Ride (inc. land acquisition)		3.8	1.3	1.3	6.4
Bandon Road Park and Ride (inc. land acquisition)		3.8	1.3	1.3	6.4
Carrigaline Park and Ride			3.8		3.8
Marketing campaign		0.1	0.1	0.1	0.3
Travel information system		1.3	1.3	1.3	3.9
Analysis, data, design, consultation and supervision		8.3	8.4	6.2	22.9
Total All Measures		**63.2**	**64.5**	**48.3**	**176.2**

Notes:
Green routes costs based on costs of implementing QBC/cycle route network in Dublin Source DTO
Fleet Upgrades already underway by Bus Eireann. Costs not included in table. Investment in QBCs will be in parallel with Bus Fleet Investment and Augmentation
Traffic calming and local environmental improvements associated with Green Routes based on costs from Dublin Corporation
Design & Supervision Costs assumed at 15% capital costs

Table N.3

INDICATIVE BUDGET FOR MAJOR ROAD SCHEMES

Scheme	Cost (€ million, 2000 prices) Tranche 1	Tranche 2	Tranche 3
Northern Ring Road	69.0	196.8	
Connection/priming for development networks	2.5	2.5	2.5
Bridges over River Lee for Docklands	12.7	44.4	44.4
Other proposals on National Primary and Secondary Routes in National Development Plan			
Total	**84.2**	**243.7**	**46.9**

Notes:
NRR cost estimate based on Northern Ring Road Feasibility Study, July 2000, Atkins McCarthy for Cork Corporation
Design etc. costs at 30% of capital costs assumed to occur in Tranche prior to Tranche when scheme constructed.
Land acquisition costs are excluded.

Table N.4

INDICATIVE BUDGET FOR DESIGN AND IMPLEMENTATION OF
Local Integrated Transport Plans

Scheme	Cost (€ million, 2000 prices) Tranche 1	Tranche 2	Tranche 3
Douglas	0.6	0.3	0.6
Bishopstown*	0.6	0.3	0.6
Carrigaline/Ringaskiddy*	1.3	0.3	1.3
Ballincollig*	1.3	0.3	1.3
Carrigtwohill	5.1	0.3	2.5
Kinsale	5.1	0.3	2.5
Bandon	5.1	0.3	2.5
Midleton	5.1	0.3	2.5
Macroom	5.1	0.3	2.5
Youghal	5.1	0.3	2.5
Mallow		5.1	0.3
Fermoy		5.1	0.3
Monard/Rathpeacon/Blarney		5.1	0.3
Total	**34.4**	**18.3**	**19.7**

Notes:
* Area largely covered by Green Routes Initiative
† Area partially covered by Green Routes Initiative

Appendix 0
Water And Drainage Infrastructure Phasing

The infrastructure analysis, which is presented separately for the Ring Towns and Rural Areas, the Greater City and the City proper, is summarised in a series of tables.

The budget costs for services, infrastructural headworks facilities are based on the costs for similar works under construction or planned elsewhere in the country.

The budget costs for services infrastructural networks facilities for Ring Towns and Rural Areas are based on a notional housing layout and are estimated to be €317,400 per hectare in the towns where 40 dwellings / hectare are assumed and €190,500 per hectare for hinterlands where 20 dwellings / hectare are assumed. The budget costs for services infrastructure network facilities in the city area is assumed to be €635,000 per hectare.

The technicalities and cost of providing water, foul and storm drainage depends on many variables. These variables should be identified and evaluated as part of action plan studies for the growth areas identified in the Strategic Development Plan.
It is important to emphasise that studies and action plans are undertaken now to ensure that the required services infrastructure is provided on programme with the Strategic Development Plan.

Water and Drainage, Ring Towns and Rural Areas: Tranche 1

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (€M)
Mallow	22.5	€9.5m	New source Reservoir and trunk mains	€4.4m	Increase hydraulic capacity of ext. wks	7.1
Mallow Hinterland	10.5	–	–	€2.5m	Upgrade ext. wks at Dromahane & Ballyclough	2.0
Fermoy	15.25	–	–	€4.4m	Increase hydraulic capacity of ext. wks	5.1
Fermoy Hinterland	20.0	–	–	€2.5m	Upgrade ext. wks at Kilworth & Rathcormac	3.8
Youghal	8.0	€2.5m	Upgrade source output	€19.1m	New treatment plant	2.5
Youghal Hinterland	11.0	€1.3m	Upgrade Killeagh supply	€1.3m	Upgrade Killeagh wks	2.1
Bandon	8.0	€3.8m	Expand source output and new reservoir	€12.7m	Upgrade network capacity	2.5
Bandon Hinterland	60.0	–	–	–	–	1.8
Macroom	8.25	€3.2m	New reservoir to improve supply	€3.2m	Upgrade hydraulic capacity	2.7
Macroom Hinterland	10.5	–	–	–	–	2.0
Kinsale	1.0	€1.3m	Rearrange source supply routing	€12.7m	New treatment works and collection system	0.3
Kinsale Hinterland	6.5	–	–	–	–	1.3

Notes:

1. ***HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.***
2. ***NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.***

Water and Drainage, Ring Towns and Rural Areas: Tranche 2

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (€M)
Mallow	39.5	—	—	6.4	Increase hydraulic capacity	114.3
Mallow Hinterland	13.5	—	—	—	of existing works.	2.5
Fermoy	15.75	—	—	—		5.1
Fermoy Hinterland	8.0	—	—	4.4	Increase hydraulic capacity of	1.5
Youghal	13.25	—	—	—	existing works.	4.2
Youghal Hinterland	20.0					3.8
Bandon	7.25	—	—	—		2.3
Bandon Hinterland	2.5	—	—	—		0.5
Macroom	8.0	—	—	—		2.5
Macroom Hinterland	4.0	—	—	—		0.6
Kinsale	1.75	—	—	—		0.6
Kinsale Hinterland	3.5					0.6
		—	—	—		
		—	—	—		
		—	—	—		
		—	—	—		
		—	—	—		

Notes:

1. ***HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.***
2. ***NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.***

Appendix O
Water And Drainage Infrastructure Phasing

Water and Drainage, Ring Towns and Rural Areas: Tranche 3

Location	Hectares	HEADWORKS: Water		HEADWORKS: Sewers		NETWORKS
		Costs	Works	Costs	Works	Costs (€M)
Mallow	22.5	–	–	–	–	7.1
Mallow Hinterland	11.56	€6.4m	Upgrade supply capacity at Dromahane & Ballyclough	–	–	2.2
Fermoy	8.0	€9.5m	New reservoir on northside and supply upgrade	–	–	2.5
Fermoy Hinterland	6.5	–	–	–	–	1.3
Youghal	12.0	€12.7m	Develop new source	–	–	3.8
Youghal Hinterland	6.5	–	–	–	–	1.3
Bandon	6.75	–	–	€6.4m	Expand works capacity	2.16
Bandon Hinterland	5.0	–	–	–	–	0.95
Macroom	8.0	–	–	–	–	2.5
Macroom Hinterland	3.6	–	–	–	–	0.67
Kinsale	2.0	–	–	–	–	0.63
Kinsale Hinterland	3.6	–	–	–	–	0.67

Notes:

1. *HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.*
2. *NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.*

Water and Drainage, Ring Towns and Rural Areas: Tranche 4

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (€M)
Mallow	15.75	€6.4m	Upgrade supply capacity	–	–	5.1
Mallow Hinterland	10.5	–	–	–	–	2.0
Fermoy	14	–	–	€9.5m	–	4.4
Fermoy Hinterland	8.0	€3.2m	Upgrade supply capacity at Kilworth and Rathcormac	–	–	1.5
Youghal	9.0	–	–	€6.4m	Expand works capacity	2.54
Youghal Hinterland	8.0	€1.9m	Upgrade Killeagh supply	€3.2m	Upgrade Killeagh wks	1.52
Bandon	6.0	–	–	–	–	1.90
Bandon Hinterland	4.0	–	–	–	–	0.76
Macroom	2.5	–	–	–	–	0.80
Macroom Hinterland	4.0	–	–	–	–	0.76
Kinsale	1.75	–	–	–	–	0.57
Kinsale Hinterland	3.5	–	–	–	–	0.67

Notes:

1. ***HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.***
2. ***NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.***

Water and Drainage, Metropolitan Cork: Tranche 1

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (€M)
Ballincollig	55.25	€0.32m	2nd connection to CC&H main	€3.2m	Increase hydraulic cap. of ext wks.	17.5
Douglas/South City Environs	39.5	–	–	Incl. In	Carrigrennan scheme	12.7
Monkstown/ Passage West	12.0	–	–	–	–	3.8
Crosshaven / Myrtleville	8.0	–	–	€1.9m	Link to Carrigaline as part of the Lower Harbour Scheme	2.5
Ballyvolane	12.5	€9.50m	New reservoir & main from Glashaboy	€12.7m	Link to City network and upgrade/Glanmire Riverstown Scheme to Little Island.	4.0
Carrigaline	39.5	€6.35m	New reservoir on southside & links	Incl. In	Lower harbour scheme £35m+	12.7
Carrigtwohill/ Midleton Hint.	46.75	€4.4m	Trunk main extn. From Little Island	€3.8m	Upgrade works capacity and outfall.	14.90
Whitegate/Aghada	2.5	–	–	–	–	0.79
Cobh	26.5	Incl. In	Works in progress	Incl. In	Lower harbour scheme £35m+	8.42
Glounthaune	2.75	–	–	–	–	0.90
Monard/Rathpeacon/ Whitechurch	8.0	€2.5m+	Main link to Blarney or City	€6.4m	Link to City network	2.5
Midleton	31.5	€4.4m	Trunk main extn. from Carrigtwohill	€6.4m	Expand new works capacity	10.0

Notes:

1. ***HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.***
2. ***NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.***

Water and Drainage, Metropolitan Cork: Tranche 2

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (£m)
Ballincollig	17.0	€3.2m	For new res. South of town plus upgrade Inniscarra	€12.7m	New works S.W. of town – Killumney	5.40
Douglas/South City Environs	21.0	€6.4m	Reservoir at Rochestown and Inniscarra upgrade	–	–	6.67
Monkstown/ Passage West	5.25	–	–	Incl. In	Lower Harbour Scheme	1.65
Crosshaven/ Myrtleville	4.0	€3.2m	New reservoir	Incl. In	Lower Harbour Scheme	1.27
Ballyvolane	8.75	–	–	–	–	2.79
Carrigaline	11.75	Incl. In	Inniscarra upgrade	Incl. In	Lower Harbour Scheme	3.8
Carrigtwohill/ Midleton Hint.	55.25	€9.5m	New reservoir	€9.5m	Upgrade works capacity and outfall/link to Carrigrennan	17.5
Whitegate/ Aghada	2.0	€3.2m	New reservoir	€3.2m	Upgrade treatment works	0.63
Cobh	12.25	–	–	Incl. In	Lower Harbour Scheme	3.94
Glounthaune	2.75	–	–	–	–	0.9
Monard/Rathpeacon/ Whitechurch	63.0	€12.7m	Trunk main from Inniscarra and new reservoir	€12.7m	New treatment works with outfall	20.0
Midleton	31.5	€9.5m	New reservoir	€9.5m	Extend treatment works	10.0

Notes:

1. ***HEADWORKS** refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.*
2. ***NETWORKS** refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.*

Water and Drainage, Metropolitan Cork: Tranche 3

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (€M)
Ballincollig	6.75	–	–	–	–	2.16
Douglas/South City Environs	–	–	–	–	–	–
Monkstown/Passage West	–	–	–	–	–	–
Crosshaven / Myrtleville	2.75	–	–	–	–	0.90
Ballyvolane	5.0	€6.4m	New reservoir	–	–	1.60
Carrigaline	7.0	–	–	–	–	2.22
Carrigtwohill/ Midleton Hint.	21.0	–	–	–	–	6.67
Whitegate/Aghada	–	–	–	–	–	–
Cobh	14.25	€3.2m	New reservoir	–	–	4.52
Glounthaune	2.75	€3.2m	New reservoir	€4.4m	New reservoir	0.90
Monard/Rathpeacon/ Whitechurch	–					–
Midleton	78.25	€6.4m	Extend reservoir	€6.4m	Extend treatment works	24.90

Notes:

1. ***HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.***
2. ***NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.***

Water and Drainage, Metropolitan Cork: Tranche 4

Location	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs (€M)	Works	Costs (€M)	Works	Costs (€M)
Ballincollig	4.5	--	--	--	--	1.43
Douglas/South City Environs	--	--	--	--	--	--
Monkstown/ Passage West	6.0	--	--	--	--	1.90
Crosshaven/ Myrtleville		--	--	--	--	--
Ballyvolane	7.75	--	--	--	--	2.40
Carrigaline	0.5	--	--	--	--	0.17
Carrigtwohill/ Midleton Hint.	52.25	Incl. In	2nd Inniscarra upgrade	--	--	16.5
Whitegate/Aghada		--	--	--	--	8.60
Cobh	27.0	Incl. In	2nd Inniscarra upgrade	Incl. In	Lower Harbour Scheme	--
Glounthaune	--	--	--	--	--	--
Monard	--	--	--	--	--	24.9
Midleton	28.25	Incl. In	2nd Inniscarra upgrade	--	--	

Notes.

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2. ***NETWORKS** refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.*

Water and Drainage, Cork City: Tranches 1 & 2

Tranche	Hectares	HEADWORKS				NETWORKS
		Water		Sewers		
		Costs	Works	Costs	Works	Costs (€M)
1	33	€14.6m	Refurbishment and replacement of network	€264	Phase I: City Centre, Bercenmanna Road	21
		€15.2m	Lee Road waterworks upgrade and extension		Main Interceptor and siphon. Atlantic Pond pumping station. Summerhill North and Lower Glanmire Road	
		€1.3m	Tivoli mains			
		€5.1m	New reservoir at Shanakiel		Phase II: Rising mains from Atlantic Pond to Mahon.	
		€1.9m	Mardyke water mains		Lough Mahon Crossing.	
		€2.5m	Other		Glanmire Interceptor Sewer	
					Phase III: Treatment Works and outfall at Carrigrennan.	
				€7.6m	Kiln River and Glashaboy River.	
2	34	€19.1m	Refurbishment of Network	--	--	21.6
3	31	€19.1m	Refurbishment of Network	--	--	
4	36	--	--	--	--	22.9

Notes:

1. HEADWORKS refer to developing or extending sources; providing trunk mains; developing new or expanding treatment works and providing new or enlarged reservoirs. These relate to water or sewers but not to new major roads.
2. NETWORKS refer to the cost of developing the roads; watermains; sewers and surface water drainage; footpaths and public lighting facilities, which will be needed to service the housing layouts within the specific growth locations.

Appendix P
Metropolitan Rail Cost Benefit Summary

The Cost Benefit Analysis over 30 years for the Cork – Midleton, Cork – Cobh and Cork – Blarney lines, indicates that the cost and benefits would be as follows:

Costs

Construction cost (excluding Kent Station Refurbishment)	€70.9M
Purchase of rolling stock	€18.5M
Operating costs	€225.3M
Total Costs	€314.6M

Benefits

Time Savings existing users	€14.9M
Decongestion time savings for car users	€238.2M
Decongestion vehicle operating costs	€35.6M
Road Accident Savings	€35.8M
Total Savings	€324.3M

This analysis indicates that the scheme has a marginal positive benefit of €9.65M over the 30 years of the scheme and a cost benefit ratio of 1.03. The benefits of the scheme are largely accrued in the latter 15 years, which accounts for 66% of the benefit. This is due to the decongestion benefits of reduced car travel into Cork City Centre which becomes more significant in the latter years.