

9. VISION AND STRATEGY

Separate development paths for the Metropolitan Area and the Hinterland Area are proposed. In both areas, the strategy favours and facilitates public transportation with consequent consolidation of future growth into a limited number of locations.

Significant levels of development are envisaged within the Metropolitan Area, where the objective is to achieve appropriate conditions for a much-enhanced public transport system. The population of this area is envisaged to grow from 1.1 million to almost 1.25 million, accommodated in 511,000 households. This represents an increase of over 150,000 households (42%) over the period.

In the Hinterland Area, development will be concentrated into 'development centres' located on existing or future transportation corridors at Naas-Newbridge-Kilcullen, Navan, Balbriggan and Wicklow (with additional secondary centres at Arklow, Athy, Kildare-Monasterevin and Rush-Lusk). The population of the Hinterland Area is envisaged to increase from about 300,000 to over 400,000 by 2011, accommodated in 150,000 households. This represents an increase of 63,000 households (73%). The 'development centres' will be separated from each other and from the Metropolitan Area by 'Strategic Green Belts'.

Employment in the future will be located in a combination of existing employment centres and additional centres located, where possible, to avail of public transport. Retail provision for food and similar goods will be well-distributed throughout both the Metropolitan and Hinterland Areas, whilst comparison goods shopping will be located in the 'development centres' in the Hinterland Area and in the city centre and at selected nodes in the Metropolitan Area.

The infrastructure required for the implementation of the strategy is identified, but specific proposals will require further study prior to implementation.

In deciding which of the options, or which combination of these, offers the best potential for the Greater Dublin Area, regard must be had to a number of key considerations and principles (see Chapter 5) that include the following:

- The need for flexibility in the selected approach so as to accommodate whatever level of actual growth occurs over the period up to 2011.
- The requirements of sustainability will grow increasingly important over the period covered by the Strategic Planning Guidelines. This includes the need for the conservation of land and other resources and the development of transportation modes alternative to the private car (see below).
- The need to provide a foundation for the on-going development of the Greater Dublin Area after 2011.

The strategy will also need to incorporate measures to ensure that future growth is distributed in accordance with the selected strategy. A particular issue in this regard is the extent of existing zoned lands throughout the Greater Dublin Area.



FACTORS AFFECTING STRATEGY

Current Issues and Concerns

At the present time, two major issues dominate public debate concerning the future planning of the Greater Dublin Area. These are transportation and house prices and both are currently being addressed through government action. Whilst these issues are clearly important, and transportation in particular will have a key influence on the future planning of the Greater Dublin Area, it is important that the selection of a long-term strategy for the Greater Dublin Area is not unduly dominated by current public debate.

The on-going traffic congestion, especially in the built-up area of Dublin, and the perceived and real difficulties with the public transport system were strongly highlighted to the consultants during preparation of the Strategic Planning Guidelines. Two matters have combined to make this a pressing issue:

- very significant delays in the implementation of planned measures and projects to alleviate traffic congestion and improve public transport; and
- levels of economic (and car ownership) growth that were not anticipated.

An adequate transportation system is a pre-requisite for the future development of the Greater Dublin Area. The existing system is inadequate to meet current needs and requires interventions to increase capacity to facilitate future growth. This includes both public transport and the road system. However, it is not possible to cater for the level of growth anticipated for the Greater Dublin Area by using a transportation system based primarily on the use of the private car.

Moreover, the major schemes currently in progress or in planning (including the DART extensions, the Port Access Tunnel, LRT proposals and other schemes in the DTO Action Plan) are primarily intended to address existing shortcomings and will provide only limited capacity for large-scale growth in the future.

The transportation system is, therefore, at crisis point and requires both the immediate implementation of the currently planned schemes and the implementation of actions to facilitate the orderly growth and development of the Greater Dublin Area into the future. This double requirement is an immense one that has huge investment implications. It will be essential for the public transport schemes to be implemented in concert with the new developments, since any significant delay will inevitably lead towards unsustainable car-based travel.

The immediate concerns over house prices have been addressed in the Bacon Report and have less long-term strategic implications for the Greater Dublin Area than transportation. Nevertheless, it is important to ensure that any actions arising from the adoption of the Strategic Planning Guidelines do not exacerbate the existing difficulties and, if possible, should seek to alleviate them.

Requirement for Sustainable Development

The principles of sustainability have been discussed in Chapter 5. These have been adopted by the Irish Government and by Local Government within the Greater Dublin Area, and have been endorsed as the basis for future planning and development.

Over the period covered by the Strategic Planning Guidelines, the need to achieve greater levels of environmental sustainability in development will become increasingly accepted by the public. These principles also underlie the policy direction contained in the European Spatial Development Perspective.

The Strategic Planning Guidelines must, therefore, be fundamentally based on the principles of sustainable development.

Aspects of the National Sustainable Development Strategy with particular significance to the selection of a preferred strategy for the Greater Dublin Area include:

- The need to achieve a reduction in the growth in demand for transport.
- The need to achieve a clearer demarcation between urban and rural land uses
- The need to place increasing emphasis in the future on transportation alternatives to the private car, particularly the rail network.

The adoption of the principles of sustainability, as set out in the National Sustainable Development Strategy, implies that the preferred strategy for the Greater Dublin Area must:

- fundamentally seek to reduce growth in demand for transport;
- propose a distribution and form of development that reduces urban sprawl and creates a clearer distinction between urban and rural areas; and
- incorporate, as an integral part of the strategy, a public transport system of sufficient attractiveness, scale and accessibility to provide a real alternative to the private car. This should be built around the rail network but should incorporate LRT and the significant further development of the bus system, which will remain the principal form of public transport. An adequate public transport system must include both improved infrastructure and improved service elements⁴. There should also be enhanced opportunities for walking and cycling.

The Case for Public Transport

In line with the requirements of the brief and sustainable development, the preferred strategy must be developed with the specific objectives of

- promoting a reduction in the overall growth in travel demand; and
- encouraging a shift towards public transport modes.

This approach inevitably places substantial emphasis on public transport modes, with the consequence that significant investment in public transport infrastructure will be required.

It is widely recognised throughout Europe that public transport provides an important social function and, in order to avoid the exclusion of disadvantaged passenger groups, it is necessary to operate a comprehensive network. However, this full service network is generally not commercially viable and, in order to achieve the full social and



environmental benefits, there is still a requirement for additional revenue above that collected from the passengers. This can be provided in a variety of ways including specific amounts in respect of individual services, the support of reduced fare schemes and block grants for the operation of the entire system. Each method has both benefits and drawbacks, and a range of approaches can be found in other European capitals. Some commercial organisations, such as major retailers, can also become involved in the funding of public transport operations, though these are inevitably closely associated with their particular facilities.

The capital costs associated with the construction of new infrastructure have historically been met from the public purse, though private capital is increasingly being considered for Design, Build, Finance and Operate (DBFO) projects. Private-Public Partnerships (PPP), where public authorities provide funds for specific facilities (such as new vehicles, bus stations, traffic management measures, etc.) in association with guaranteed levels of service and quality, can also be considered.

The adoption of an unsustainable approach (though this would be wholly contradictory to the brief) would lead to the following scenario.

- Development would occur only in locations close to highway infrastructure and would give rise to significant investment in further road building. It would be difficult to find space for such construction within the main urban area of Dublin and so the majority of new schemes would be outside the M50. People would live and work in peripheral locations, and would be largely dependent on the car to reach their various destinations. Bus priority measures within the city would be removed, with a consequent decrease in bus speeds. This, in turn, would lead to lower bus patronage and revenues, and hence to lower service levels. Car ownership levels would continue to rise and demand would eventually outstrip road supply, even in the semi-rural areas. In the absence of any viable public transport alternative, congestion would increase and accessibility would be massively reduced. Employment would be relocated from the centre of Dublin to those outlying areas that retained some vestige of accessibility and eventually a situation would be reached where the car-dependent society would be strangled by its own transport system.

If the recommended strategy were to be adopted, but the public transport aspects were not implemented then a different scenario would unfold.

- The original DTI produced a range of recommendations to meet the present and future transport needs of the city. Many of these were delayed from the original time-scale, whilst the growth predictions on which they were based have been comfortably exceeded. Dublin now finds itself with substantial traffic problems and, in many ways, a similar situation could arise in the future should recommendations for public transport not be fully implemented. Short-term growth would be partially accommodated within the committed DTI schemes, such as QBC's and LUAS, but the longer-term viability of the area, including both the immediate built-up area of Dublin and the wider hinterland area, would be compromised. Traffic congestion would grow, particularly on radial routes into the centre, and pressure to redevelop close to road infrastructure would intensify.

The conclusion is that there is no alternative to a sustainable, public transport based solution and that failure to implement the appropriate measures could seriously prejudice the economic and social growth of Dublin.

STRATEGIC VISION

As stated earlier, it is possible to distinguish between the:

- Metropolitan Area comprising the existing built-up area of Dublin and its immediate environs (as defined in Appendix 4); and the
- Hinterland Area comprising the remainder of the Greater Dublin Area and containing a range of towns of various sizes together with extensive areas of countryside.

This distinction will remain in the future and these two contrasting areas, the Metropolitan Area and the Hinterland Area, provide a basis for the development of separate, but co-ordinated and inter-related, development paths that will move forward together, in parallel, each one facilitating the overall economic and social development of the Greater Dublin Area.

The adoption of a strategy that favours and facilitates public transportation in both areas requires the consolidation of future growth into a limited number of locations, where adequate transport infrastructure can be provided.

The strategic vision for the Greater Dublin Area therefore incorporates the following elements:

- Dublin will remain the capital city of Ireland and a major European centre, competing with other cities in the EU, and serving a wide range of international, national, regional and local needs.
- The Dublin and Mid-East Regions will continue to be attractive, vibrant locations for industry, commerce, recreation and tourism and be a major focus for economic growth within the country.
- Dublin, through its port and airport, will continue to be a very important entry/exit point for the country as a whole, and a 'gateway' between the European Union and the rest of the world, and consequently access to and through the area will continue to be a matter of national significance.
- Development throughout the Greater Dublin Area will be increasingly related to a significantly enhanced public transport system.
- Development within the Metropolitan Area will be consolidated, allowing for the accommodation of a greater population than at present, with a much-enhanced public transport system. This will require some increase in overall development densities as well as measures to ensure priority for public transport. In time, this will lead to a more compact urban form, relative to the size of the population, and will reduce the growth in overall demand for travel.
- The growth of the Metropolitan Area will be balanced by the concentration of development into major centres in the Hinterland Area. These towns (or adjacent sets of towns) will each have a high level of employment activity, high order shopping and a full range of social facilities. The longer-term objective will be to create towns, as self-sufficient as possible, with only limited commuting to the Metropolitan Area. Nevertheless, the towns will require to be well linked to Dublin by good road and rail infrastructure.



- The major centres in the Hinterland Area will be separated from each other and from the Metropolitan Area by extensive areas of 'Strategic Green Belt' land devoted to agricultural and similar uses and within which development will be limited to meeting local needs.

Future Population and Household Levels.

Population and household scenarios for the Greater Dublin Area, based on a range of migration assumptions, are outlined in Chapter 3. These indicate that the population of the area is set to increase by about 10%, even if there is no net in-migration. Allowing for a level of in-migration consistent with the economic prospects for the Greater Dublin Area, the population in 2011 could be in the order of 1.65 million, an increase of over 17% (Table 9.1).

It is prudent to plan for a future population of this scale in the Greater Dublin Area, even if circumstances result in this level not being achieved until some years after 2011. Consequently, the high in-migration population scenario is used to assign future indicative population levels to each local authority area.

Household formation is running significantly ahead of increases in population, so that the greatest challenge facing the area will be the accommodation and servicing of up to 215,000 new households. This assumes that average household size, across the Greater Dublin Area, will fall towards 2.5 (from 3.1 in 1996), though the average household size in each local authority area will vary significantly.

Table 9.1 Future Population and Household Numbers in the Greater Dublin Area

	Population		Households	
	No.	%	No.	%
Recorded 1996	1,405,671		446,251	
Projected 2001	1,491,000	6.1	507,000	13.6
Projected 2006	1,575,000	5.6	579,000	14.2
Projected 2011	1,650,000	4.8	661,000	14.2
Change 1996-2011	2,443,291	7.4	214,749	48.1

Information made available by the Central Statistics Office late in 1998 indicates that in-migration to the country is currently very high. It is, therefore, possible that some of the population growth anticipated for the 2001 to 2006 period could be brought forward to the period up to 2001, increasing household formation and giving rise to even greater demand for housing and other services in the short term.

An indication of the distribution of future population and households is given below in relation to the strategies for both the Metropolitan and Hinterland areas. This includes indicative figures for each local authority area. The indicative allocations are based on an assessment of each area, including its capacity to accommodate growth in terms of zoned and other suitable land, water supply, drainage, transport, etc., consistent with the overall strategy. Additional details are given in Appendix 5, which includes an alternative estimate of future household numbers.

In absolute terms, the Metropolitan Area is anticipated to grow by over 138,000 people and over 151,000 households by the year 2011, whilst the Hinterland Area is anticipated to grow by over 105,000 people and over 63,000 households.

Proportionally, therefore, population and households in the Hinterland Area will grow more rapidly than in the Metropolitan Area, but from a smaller base. It should also be noted that the strategy foresees most of the growth in the Hinterland Area being accommodated in a limited number of centres.

As indicated in Table 4.2 (Chapter 4), a significant portion of the estimated future growth in household numbers can be accommodated on existing residentially zoned land. All of the local authority areas in the Greater Dublin Area have sufficient zoned land to accommodate the allocated growth in household numbers well into the period covered by the guidelines. By 2006, only Dublin County Borough will require additional land, and the allocation for the period 2001 - 2006 could be met through re-development and/or development at higher densities.

However, this does not allow for an estimate to compensate for existing residentially zoned land that is not released for development. To some extent, this will be offset by the achievement of higher development densities at appropriate locations. In Dublin County Borough, in some parts of Dun Laoghaire-Rathdown and to a lesser extent elsewhere, a portion of future growth can be accommodated through re-development, thereby reducing the requirement for the zoning of greenfield lands. In Dublin City, which has only limited areas of development, as in the Docklands area, and/or the use of institutional lands.

Nevertheless, it will be necessary to zone additional lands for residential use, especially outside of Dublin city, both to meet the required levels of future growth and to compensate for lands that are not released for development. An indication of the approximate extent of the additional lands required for residential use is given in Appendix 5.

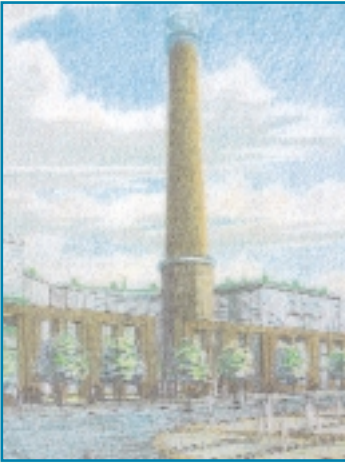
STRATEGY FOR METROPOLITAN AREA

In line with the overall vision, the strategy for the Metropolitan Area is to follow a development path that will:

- consolidate development within area;
- increase overall densities of development; and
- thereby facilitate the provision of a considerably enhanced public transport system and facilitate and encourage a shift to public transport.

This, in time, will lead to a more compact urban form, relative to the size of the population and reduce the overall growth in demand for travel, provided that travel demand management measures (that might include further controls on long-term parking, peak hour road pricing, etc.) are also introduced and implemented. This approach makes best use of the existing public transport facilities within the city and the wide-ranging commitments made in the DTI with respect to further public transport investment in the area.

Within the constraints of existing and planned wastewater treatment infrastructure, the population of the area can grow from 1.1 million in 1996 to almost 1.25 million in the future. When that figure is reached, consideration will have to be given to whether additional sanitary services infrastructure should be provided to continue the



consolidation of the Metropolitan Area and/or whether to direct the majority of future growth to the Hinterland Area.

Future development in the Metropolitan Area will be located so as to maximise the potential of the public transportation system. The additional population will be accommodated through:

- Consolidation of the three western towns of Tallaght, Lucan-Clondalkin and Blanchardstown to their approximate design populations, thereby making best use of infrastructure already provided for these areas;
- The further development of Swords (in concert with improvements to public transport), and the Bray-Greystones-Delgany area of north Wicklow.
- Limited further development of the north Kildare towns of Leixlip, Celbridge, Maynooth and Kilcock, focussed on accessibility to the public transport network, especially rail.
- The development of a limited number of new areas contiguous to existing centres and to public transport.
- Re-development of brownfield sites, though the extent of these is limited;
- Infill development, where possible, within the existing built-up area; and
- Measures to increase occupancy rates in existing residential areas where these rates are low.

In addition to new development within the Metropolitan Area, the strategy seeks for the maximum possible re-development of brownfield sites and of infill potential throughout the area.

As already stated, a principal objective of the strategy is to facilitate a much enhanced public transport system within the Metropolitan Area, incorporating both improved radial and cross-radial routes, and establishing conditions that will encourage greater use of this system.

Nodes on the rail and LRT routes and those at the intersection of major transport routes will have particular significance. In addition to the existing 'town centres' within the Metropolitan area (such as Dun Laoghaire, Tallaght, Blanchardstown, Swords and Bray) it may be possible to develop some additional urban nodes as District Centres, providing a good range of services, including significant levels of retailing, and employment activities such as office use. The location of these will depend on the future transportation system, but might include established centres such as Dundrum and Finglas, together with possibly new centres where significant amounts of re-development land are available. These nodes should be served by a coordinated bus network, not only to provide local journeys but also to provide connections to the rail and LRT routes.

The Metropolitan Area contains significant areas of land with relatively under-occupied housing, due generally to an ageing population. This land is primarily located in the inner and middle suburbs of Dublin. To address this issue, it is recommended that measures be introduced, on an area basis, with the objective of increasing occupancy

rates in selected residential areas with significant under-occupied housing. These schemes, which might initially be undertaken on a pilot basis, should focus on a variety of techniques that might include any or all of the following:

- tax relief for the sale of houses in the areas, for the leasing or rental of houses or rooms and/or for the provision of accommodation for the elderly in their own localities;
- provision of support services to facilitate the elderly in the sale/rental of their houses and in obtaining alternative local accommodation;
- direct provision of accommodation for the elderly in their own locality; and
- pilot implementation of physical changes to housing areas, such as the duplexing of residences.

Population and Households

The population of the Metropolitan Area is envisaged as increasing by about 12%. An indication of the distribution of this population, and its phasing by Census year, is given in Table 9.2. If the higher in-migration population scenario is realised, the population of the Metropolitan Area could be almost 1.25 million by 2011 or shortly thereafter.

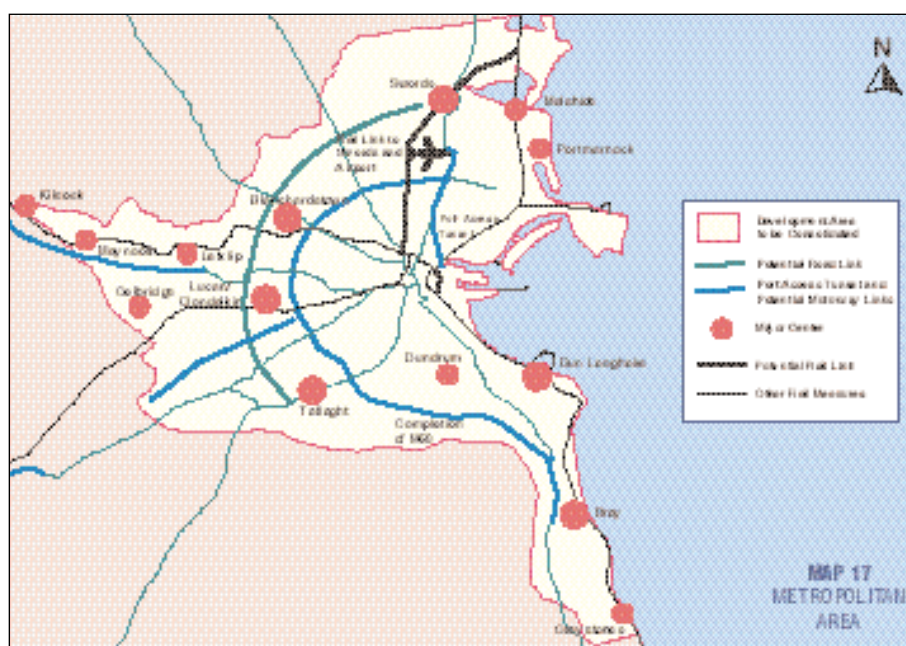
The number of households is set to increase at a greater rate than population. If the high in-migration scenario is realised and household size falls as anticipated there could be an increase of over 151,000 households (42%) in the Metropolitan Area by 2011. An indicative distribution and phasing of households is also given in Table 9.2.

Table 9.2 Indicative Distribution of Population and Households, Metropolitan Area

	Population		Households	
	No.	%	No.	%
Dublin CB				
Recorded 1996	481,854		173,085	
Projected 2001	491,000	1.9	195,000	12.7
Projected 2006	493,000	0.4	206,000	5.6
Projected 2011	502,000	1.8	211,000	2.4
Change 1996-2011	20,146	4.2	37,915	21.9
Dun Laoghaire-Rathdown				
Recorded 1996	189,999		61,469	
Projected 2001	200,000	5.3	68,000	10.6
Projected 2006	201,000	0.5	72,000	5.9
Projected 2011	200,000	-0.5	82,000	13.9
Change 1996-2011	10,001	5.3	20,531	33.4
Fingal (South)				
Recorded 1996	136,702		38,894	
Projected 2001	153,000	11.9	47,000	20.8
Projected 2006	180,000	17.6	60,000	27.7
Projected 2011	200,000	2.2	80,000	33.3
Change 1996-2011	63,298	46.3	41,106	105.7

Table 9.2 Continued

	Population		Households	
	No.	%	No.	%
Kildare (North-East)				
Recorded 1996	40,281		11,668	
Projected 2001	43,000	6.8	14,000	20.0
Projected 2006	45,000	4.7	16,000	14.3
Projected 2011	46,000	2.2	175,000	9.4
Change 1996-2011	5,719	14.2	5,832	50.0
South Dublin				
Recorded 1996	218,728		61,809	
Projected 2001	230,000	5.2	71,000	14.9
Projected 2006	242,000	5.2	87,000	22.5
Projected 2011	248,000	2.5	100,000	14.9
Change 1996-2011	29,272	13.4	38,191	61.8
Wicklow (North-East)				
Recorded 1996	41,647		12,654	
Projected 2001	45,000	8.1	14,000	10.6
Projected 2006	49,000	8.9	17,000	21.4
Projected 2011	52,000	6.1	20,500	20.6
Change 1996-2011	10,353	24.9	7,846	62.0
Total Metropolitan Area				
Recorded 1996	1,109,211		359,579	
Projected 2001	1,162,000	4.8	409,000	13.7
Projected 2006	1,210,000	4.1	458,000	12.0
Projected 2011	1,248,000	3.1	511,000	11.6
Change 1996-2011	138,789	12.5	151,421	42.1



STRATEGY FOR HINTERLAND AREA

The proposed development path for the Hinterland Area has the objective of achieving, over a period of time, a number of large towns (or adjacent sets of towns), each complete with a high level of employment activities, high order shopping and a full range of social facilities. Ideally, such towns should be self-sufficient with little or no commuting to the Metropolitan Area. However, it is recognised that this is an unachievable target in the timescale covered by the Guidelines. Nevertheless, the longer-term objective should be to achieve self-sufficient towns, and in the meantime to establish the conditions in these towns to allow for that.

It is, therefore, proposed that future development in the Hinterland Area be strongly directed into 'development centres' comprising of:

- Primary centres at Droghedaⁱⁱ, Navan, Balbriggan, Naas-Newbridge-Kilcullen and Wicklow. Apart from Navan, each of these is on an existing transportation corridorⁱⁱⁱ.
- Secondary centres at Athy, Arklow and Kildare-Monasterevin, all on existing or potential transportation corridors.

Navan has been selected as a primary 'development centre' because of its capacity, in terms of land, water supply and drainage, to accommodate considerable levels of development. This development is envisaged as including considerable levels of new employment activities. This is particularly important given that additional commuting from the town to the Metropolitan Area by private car is undesirable, and unsustainable. The provision of enhanced public transport links from Navan to the Metropolitan Area, including interim measures in the short-term, will also be important in allowing the town to develop in a more sustainable manner.

Wicklow has been selected as a primary 'development centre' because of its location relative to the Metropolitan Area and its potential to be served by rail. It is recognised that Arklow has considerable potential to develop as a self-sufficient settlement due to its size, extent of available land, etc., and this is likely to be the first of the secondary 'development centres' to be extensively developed.

In the longer term, Athy, in particular, could become a major development centre.

The concept of developing these towns, especially the larger ones, as self-contained centres is consistent with the overall policy for the development of the Mid-East Region and for towns immediately outside of the region, such as Mullingar and Portlaoise. The 'development centres' will be separated from each other, and from the Metropolitan Area, by areas of 'Strategic Green Belt' (see below).

It will be necessary to accommodate local growth in those parts of the Hinterland Area outside the proposed 'development centres'. However, development outside of the designated centres should be strictly limited to local need. The spread of development intended primarily to serve the Metropolitan Area and generating significant levels of commuting is neither environmentally sustainable or economic and should be restricted using demand management techniques. In particular the spread of housing in rural areas should be severely restricted to local need.

The form of development proposed, concentrated into urban centres, will reduce pressure on the countryside and provide a clearer distinction between urban and rural

areas. It will also reduce the need to travel, and hence reduce overall growth in the demand for transport, by providing employment alternatives to the Metropolitan Area. It is, however, recognised that commuting to the Metropolitan Area will continue from these centres, at least in the short to medium term, and consequently a number of public transport facilities have been identified as being necessary for the growth of the major Hinterland towns.

The basis for the growth of the 'development centres' is that they do not become primarily dormitory towns for the Metropolitan Area. For this reason, it may be desirable to constantly monitor their development and seek to co-ordinate the release of residentially zoned land to broadly reflect the establishment of employment in the centres.

It is recognised that towns outside of the Greater Dublin Area, especially those with good rail connections such as Drogheda and Dundalk but also towns such as Mullingar, have increasing levels of commuting with the Metropolitan Area. These towns have considerable potential for development, with the possibility of offering relatively cheaper housing than the Greater Dublin Area. Whilst the brief for the Strategic Planning Guidelines does not extend to these towns, their development should be monitored and considered in any review of the Guidelines.

Population and Households

The population of the Hinterland Area is envisaged to increase by nearly 36%. An indication of the distribution of this population, and its phasing by Census year, is given in Table 9.3. If the high in-migration scenario is realised, the total population of the Hinterland Area could be in excess of 400,000 by the year 2011.

The total number of households in the Hinterland Area could increase by over 63,000 (73%) over the period up to 2011. An indicative distribution and phasing of households is also given in Table 9.3.

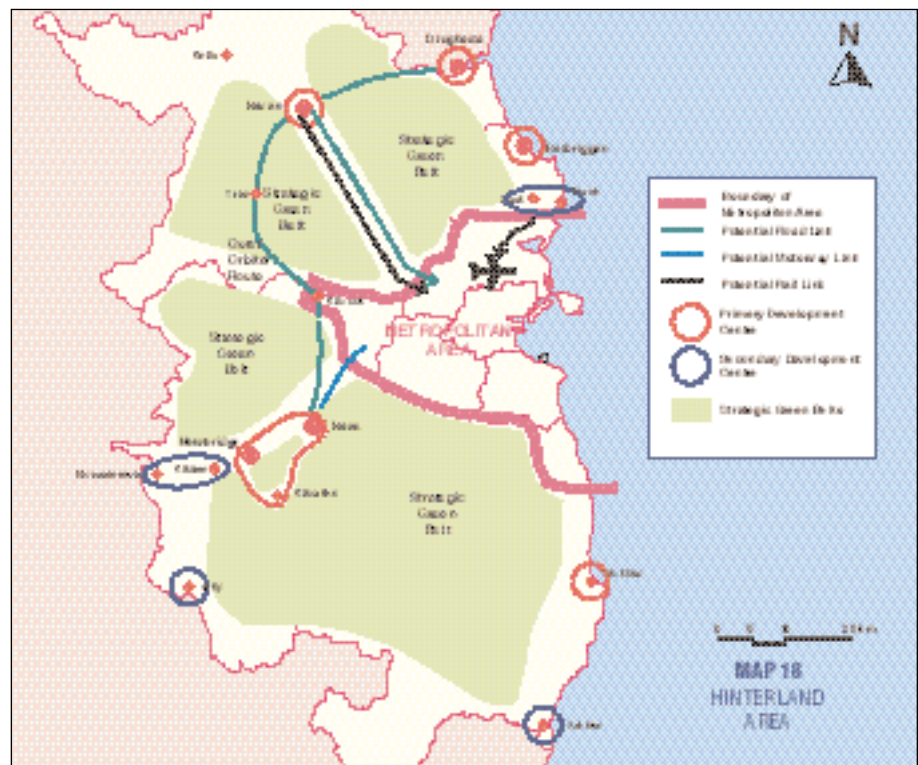


Table 9.3 Indicative Distribution of Population and Households, Hinterland Area

	Population		Households	
	No.	%	No.	%
Fingal (North)				
Recorded 1996	30,981		8,827	
Projected 2001	35,000	13.0	10,000	13.3
Projected 2006	39,000	11.4	12,000	20.0
Projected 2011	46,000	17.9	18,000	50.0
Change 1996-2011	15,019	48.5	9,173	103.9
Kildare (Hinterland Area)				
Recorded 1996	94,711		27,373	
Projected 2001	105,000	10.9	30,000	9.6
Projected 2006	116,000	10.5	40,000	33.3
Projected 2011	124,000	6.9	47,000	17.5
Change 1996-2011	29,289	30.9	19,627	71.7
Meath				
Recorded 1996	109,732		31,863	
Projected 2001	120,000	9.4	37,000	16.1
Projected 2006	133,000	10.8	44,000	18.9
Projected 2011	154,000	15.8	57,000	29.5
Change 1996-2011	44,268	40.3	25,137	78.9
Wicklow (Hinterland Area)				
Recorded 1996	61,036		18,609	
Projected 2001	69,000	13.0	21,000	12.8
Projected 2006	77,000	11.6	25,000	19.0
Projected 2011	78,000	1.3	28,000	12.0
Change 1996-2011	16,964	27.8	9,391	50.5
Total Hinterland Area				
Recorded 1996	296,460		86,672	
Projected 2001	329,000	11.0	98,000	13.1
Projected 2006	365,000	10.9	121,000	23.5
Projected 2011	402,000	10.1	150,000	24.0
Change 1996-2011	105,540	35.6	63,328	73.1

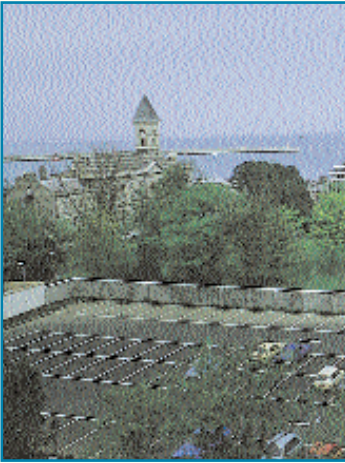
EMPLOYMENT

The strategy envisages that the existing centres of employment in the Greater Dublin Area will continue to be important in the future and that additional centres will supplement these.

In recent years, there has been an increasing blurring of the distinction between manufacturing and service industries, for example, in electronics and computer software, and it must be recognised that no simple, clear distinction can be made between them in planning terms.

Nevertheless, there are good reasons for seeking to differentiate between:

- primarily goods-based employment, such as many forms of manufacturing, that because of the volumes of goods involved, require good access to the National Road system; and



- primarily people-based employment such as various office, tele-sales and other service activities that would benefit from good public transport access.

Where possible, this distinction should be reflected in the designation of additional lands for employment uses in the future and in the review of existing designations in the development plans. Activities generating significant quantities of goods can be facilitated at locations readily accessible to the National Routes network, whilst activities that are more service based should be located where good levels of public transport can be provided. Where possible, goods-based employment activities should also be located where they can be adequately served by public transport.

Metropolitan Area

Whilst the number of workers in the city centre is likely to increase in absolute terms, it is also likely to become a decreasing proportion of all employment in the area. The numbers employed at existing centres of employment such as those in the Leixlip, Swords, Tallaght, Dun Laoghaire - Rathdown, Blanchardstown/Mulhuddart areas, where there are available zoned lands, are likely to increase.

Additional centres of employment will also be required. Considerable areas of land in the northern and western part of the Metropolitan Area are zoned for additional industrial use, reflecting the attractiveness of these areas for such uses. Further lands for industrial and other goods-based employment activities will be required elsewhere in the Metropolitan Area and these should be located so as to spread the benefits of employment and to reduce the need to travel.

People-based employment activities should be located at appropriate existing and future public transport nodes, distributed throughout the Metropolitan Area.

Hinterland Area

A fundamental aspect of the strategy for the Hinterland Area is the establishment of significant levels of employment in the 'development centres', particularly the primary towns. This is essential to ensure that each town becomes a balanced community with a range of employment and service activities to supplement residential use.

Sufficient land, together with the infrastructure requirements for industry and other employment activities will be required in each 'development centre'. The majority of future employment will be encouraged into Navan, Balbriggan, Wicklow and the Naas-Newbridge-Kilcullen area (and later to the other 'development centres'). In addition, the provision of employment, at an appropriate scale to meet local needs, should be facilitated elsewhere in the Hinterland Area.

Specific measures, such as the provision of advance factory units and/or taxation incentives, for the attraction of employment provides to the 'development centres' may also be required. This will ensure that these centres are relatively more attractive for development than other areas. This will support their growth within the context of the overall strategy.

COMMERCIAL AND RETAIL

Significantly increased levels of spending are likely in the future, reflecting the growth of population and the economy. This will give rise to a need for considerable levels of

additional retail floorspace in the future^{iv}. The requirement will be split between convenience goods (primarily food and regularly purchased household items) and comparison goods.

Broadly, the additional convenience goods floorspace requirements should be distributed in line with additional population growth.

The predominance of Dublin city centre for commercial and retailing activity is likely to continue. However, the need for significant levels of additional comparison floorspace provides an opportunity to strengthen the role of other centres, including the 'development centres' in the Hinterland Area and selected nodes within the Metropolitan Area in line with the overall strategy.

Metropolitan Area

Dublin city centre will remain the principal location for retailing and similar commercial activity. Recent years have seen the development of increased levels of retail services, such as restaurants, in the city centre and the further development of high order, specialist retail outlets. This trend is likely to continue and may be accompanied by a decline in the significance of the city centre for certain forms of lower order comparison shopping (lower cost clothing, footwear, etc are now widely sold at suburban centres) and for bulky household durables that are increasingly sold in retail warehouses.

It is important that the city centre of Dublin retains a strong retail base. For certain types of specialist retail sales, the city centre serves a national catchment as well as serving a regional catchment for a wider range of goods. Consideration might be given to the creation of an additional shopping precinct within the centre of Dublin city, located in the general Docklands area and served by the proposed new rail link east of the Loop Line Bridge (see below).

As already mentioned, there is potential to further develop comparison shopping at a number of locations in the Greater Dublin Area. However, the level of growth at these centres should not be allowed to threaten the city centre, and it will be important to monitor the development of retailing closely in this regard.

Use of the private car, by those with access to it, will continue to be an important characteristic of convenience goods retailing. To reduce the demand for travel, convenience goods outlets should be well distributed throughout the Greater Dublin Area, including the Metropolitan Area. Application of the current floorspace limit of 3,000 sq. m. on supermarket size will, if it is continued, increase the number of convenience outlets required and preclude the development of very large hypermarkets and similar developments, that would generate high levels of traffic movement and possibly threaten existing centres. These convenience goods outlets are likely to continue to be served mainly by car, and should be located at suitable and accessible sites on the main road network, but not on the National Road network. The sites should be located where they will not have undue impact on existing town centres and other established retail locations. Priority should be given to convenience goods sites served by public transport, especially rail and LRT.



Trips to comparison goods retail centres are less dependent on the use of the private car than convenience goods centres, as witnessed by the on-going strength of the city centre. As more specialised shopping and retail services develop, this trend will intensify. Bulky goods are increasingly sold in retail warehouses that facilitate use of the car and may also offer home delivery. There is thus a good case to locate future large-scale comparison provision at centres that are well served by public transport.

The major retail elements, incorporating both convenience and comparison goods sales, to serve the western towns of Tallaght and Blanchardstown are substantially in place, but additional provision will be required to serve the town of Lucan/Clondalkin. Swords will also require significant additional retailing provision to match its current population and its expected growth.

These centres, together with a limited number of existing nodes within the built-up area that are well served by public transport (e.g. Dundrum when the LUAS line is implemented), should be allowed to develop good levels of comparison shopping, commensurate with the overall growth in retail expenditure and without constituting a threat to the city centre.

The trend towards retail warehousing for the sale of relatively bulky household durables is likely to continue, and this form of retailing needs to facilitate use of the private car. The future provision of retail warehousing should, therefore, be located at accessible points on the road network that are also served by public transport, but significantly fewer of these will be required than for convenience retailing.

The future provision of retailing in the Metropolitan Area should incorporate:

- A wide distribution of reasonably-sized convenience goods outlets at locations accessible by car with priority given to places also served by good public transport;
- A set of established and developing centres well served by public transport, which together with the city centre, would offer a good provision of comparison goods. These development centres might include Bray, Swords, Tallaght, Blanchardstown, Lucan/Clondalkin, Dun Laoghaire, Dundrum, Blackrock etc.; and
- A limited number of retail warehouse developments at locations accessible by car.

The development of very large, regional scale retail malls or superstores on greenfield sites or outside of established centres is not regarded as sustainable, and proposals for these should be resisted.

A particular issue arises in relation the towns in North-East Kildare. Clearly, each of these centres will require convenience goods provision commensurate with its population. However, none of the towns is of sufficient size (existing or future) to accommodate large-scale comparison shopping, and the towns fall within the catchment of other large centres. Nevertheless, it would be desirable to develop one of these towns to provide a level of comparison shopping sufficient to reduce dependency on centres outside of the area.

Hinterland Area

Each of the 'development centres', especially the primary ones, will require a significant level of retail provision and other commercial activities consistent with their role as 'stand-alone' settlements. Each of these centres should develop a mix of convenience and comparison shopping and, as their populations expand, retail warehousing. In assessing the capacity of these towns for additional retailing regard should be had to their role as service centres for the wider rural hinterland.

The strategy for future retail provision in the Hinterland Area incorporates:

- A wide distribution of convenience goods outlets at town centre locations, with adequate car parking and preferably also accessible by public transport and including both the 'development centres' and other centres in the Hinterland Area;
- The provision of a good range of comparison goods outlets at town centre sites in the primary 'development centres'; and
- A number of retail warehouse developments in the 'development centres' when these grow sufficiently to justify such development.

Transportation

Significant improvements to the transportation infrastructure throughout the Greater Dublin Area will be needed to facilitate the level of growth anticipated in the future. The strategy places particular emphasis on public transport. In the Metropolitan Area, the intention is to develop a 'mesh' of public transport routes, primarily bus-based but with significant contributions from LUAS and the rail system, so as to provide a much enhanced service throughout that area. These public transport objectives will complement the further development of the road system both in the Metropolitan Area and the Hinterland Area.

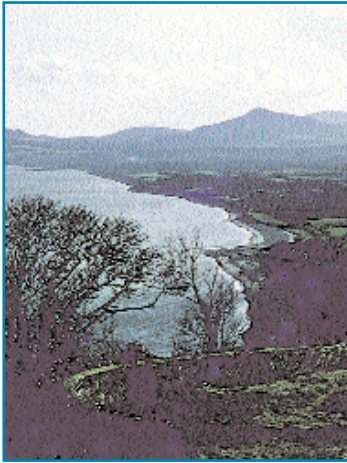
A fundamental function of the transportation system, including both roads and public transport, in the Greater Dublin Area is the linking of the Hinterland and Metropolitan Areas. Because of this, the transportation elements of the strategy are best considered in a form that integrates both parts of the Greater Dublin Area and are consequently categorised here as:

- Schemes that meet current needs and are in progress or firmly committed.
- Public transport proposals and concepts which address future requirements.
- Road proposals and concepts which address future requirements.

Other than the current schemes, the proposals and concepts discussed below will require further consideration and evaluation in the context of the update of the DTI strategy, which is currently underway.

Current Schemes

The current schemes have resulted from the original DTI study and from the more recent Short Term Review. These are as follows:



Short Term Schemes

- Quality Bus Corridors.
- Additional buses to increase capacity.
- Measures to encourage and facilitate cyclists and pedestrians.
- DART extensions to Greystones and Malahide.
- Additional QBC to Ballymun.
- Orbital QBC.
- Upgrading of rail line to Maynooth.
- Provision of park-and-ride schemes.
- Re-signaling of rail route through city centre to increase capacity.
- Additional DART and suburban rail rolling stock.

Medium Term Schemes

- Completion of the M50.
- Improvements to major radial routes within the area, such as the M1 north of the airport and the N11.
- Port Access Tunnel.
- LRT route to Tallaght/Ballymun/Sandyford/Docklands.
- Additional QBC's.
- Additional cycle and pedestrian facilities.

Longer Term Schemes

- LRT route to the Airport.

Public Transport Proposals and Concepts

Further improvements to the public transport system will be required and these will enable the longer-term population growth to be accommodated in a sustainable fashion. Some proposals have been developed by those organisations, such as DTO and CIE, with a direct interest in transportation in Dublin. Some additional concepts have been developed during the course of this project, with the general objective of providing Dublin with a high-quality public transport network based around a revitalised rail network. These proposals and concepts, each of which will require additional study and consideration, are as follows:

- Additional rail capacity in the city centre through provision of new links including an additional link, east of the existing Loop Line, across the river to the Barrow Street area. This would service the IFSC and strengthen proposals for the Docklands Area.
- Priority improvement of public transport to Swords, which is an existing major development node where further expansion is anticipated as part of the overall strategy for the Metropolitan Area. Measures should be considered for the improvement of bus services to and within Swords and the development of links to the DART. Plans should also be prepared for the provision of railed public transport (heavy rail and/or LRT) in the medium-term.
- Further signalling improvements on the Howth Junction to Barrow Street section to increase capacity.
- A heavy rail link to the Airport. This would potentially provide a better capacity and an enhanced level of service than the proposed LRT link, though the schemes could be complementary. It could also service the Swords area, which has been identified

as requiring significantly enhanced public transport facilities. The connection could be provided through a branch from the Maynooth line serving Swords and Dublin Airport, with a possible city terminus at the new Barrow Street station, utilising the proposed eastern link. Alternatively or additionally, main line trains on the Belfast line could be routed via Swords and the Airport, possibly to the former terminus at Broadstone, which might be connected into the LRT network. This would then release capacity on the coastal DART route that, in the longer term, might facilitate the further development of the coastal towns of Fingal, especially Balbriggan. It would also have significant national advantages in bringing Dublin Airport onto the national rail system.

- Improvement of suburban services to Heuston, with consideration being given to taking trains via the Phoenix Park tunnel to Connolly, and perhaps into Barrow Street. These would use the more northerly of the two parallel rail routes from Glasnevin Junction into Connolly and therefore would improve the utilisation of existing rail alignments.
- Increases in suburban rail capacity. There are significant capacity advantages if short-distance suburban services can be physically separated from longer-distance inter-city services. This is best achieved by converting from double-track to quadruple track and this could be considered on both the Maynooth and Kildare lines (there are major constraints to achieving this on the Drogheda line).
- Improved city centre connections. The various rail proposals (and LUAS) will improve public transport connections within the city centre and, in particular, will provide access into the main commercial and retail areas south of the Liffey. However, in the short term, these internal connections could be provided by a high frequency bus service operating between Heuston, Connolly and the principal employment areas. This service would require substantial traffic management measures to isolate bus operation from ambient road congestion.
- Further measures to improve bus services, which will remain the principal mode of public transport, including additional bus priority schemes, additional park-and-ride schemes and additional cross-radial services to link major employment and service nodes, especially within the Metropolitan Area.
- The reinstatement of the former inland rail route from Navan to Dublin. If feasible, this would facilitate the development of Navan and considerably enhance its role as a 'development centre'. Initially, examination of the project has concentrated on the section from Clonsilla to Dunboyne. The absence of any potential large towns on the route is a constraint, and its viability will depend on population growth, commuting patterns, service levels and infrastructural costs. The scheme requires further study, which should be undertaken in the short term. The possibility of taking the route through Blanchardstown town centre (where a reservation exists) should be examined, together with the feasibility of linking through Dunshaughlin, Rathoath and Ashbourne to Swords. Potential routes for the link to Navan should be reserved free of development, pending the making of a decision.
- Local bus services. Each of the proposed 'development centres' in the Hinterland Area should follow the dictates of sustainability and seek to reduce the need to travel and to transfer journeys from the private car to public transport. An adequate bus based public transport service will, therefore, be required in these towns.



More detailed studies of each proposal will be needed to confirm their feasibility, cost and economic return. In these studies, indirect social and environmental costs, such as traffic congestion and damage to the environment, should be considered alongside normal economic costs.

Road Proposals and Concepts

The principal road proposals to serve the Hinterland Area also form part of the provision of the National Road system, which is being developed primarily to serve national, as opposed to regional, needs. The development of the National Road network should be linked to concomitant land use policies to ensure that the infrastructure is used to facilitate national development and to provide ready access to ports, airports, etc.

Each of the proposed primary 'development centres' is, or will be, linked to the Metropolitan Area by motorway or dual carriageway and the key issue here is to constrain the growth of commuting traffic. This will release capacity on these roads for national traffic and for access from the 'development centres' to Dublin port and airport so as to facilitate the development of employment at the centres and to meet national requirements for access through Dublin. Where possible, commuting journeys should be facilitated through the development of public transport alternatives, especially along the transportation corridors and also along the LRT and QBC corridors within the Metropolitan Area. Specific land-use planning constraints restricting sporadic and ribbon development along major routes may also be required.

Fundamental reasons for developing the Metropolitan Area include the achievement of overall reductions in the growth in demand for travel and the facilitation of public transport. However, further improvements to the road system will be necessary both to facilitate travel within the Metropolitan Area and traffic seeking access to the port, airport and through the area as part of national journeys. These schemes, which will require additional study and consideration, are as follows:

- Further improvements to the M50, including a second bridge at the 'Westlink' crossing of the Liffey, the upgrading and improvement of interchanges and the provision of additional lanes. This should be the first priority in the improvement of orbital routes in the Metropolitan Area.
- The 'development centres' would be strengthened by the provision of good links between them, avoiding the necessity to pass through the Metropolitan Area. Improved orbital routes, from Drogheda and the M1 to Navan via Kilcock to the Naas-Newbridge-Kilcullen area would, therefore, be required (good single carriageway road with limited access might suffice). Extension of this route to Wicklow and/or Arklow could be considered, thereby improving access from the Hinterland to port facilities.
- The provision of a link, additional to the M50, from the Swords/Airport area via Blanchardstown/Clondalkin/Tallaght to facilitate local traffic and relieve capacity on the M50 for longer-distance movements. The potential of this route to generate, rather than alleviate, additional demand for travel will require to be examined.

- The provision of a southern port access route would facilitate traffic passing through the Metropolitan Area from north to south, especially if the M50 was at capacity, as well as facilitating the port. It would thus reduce pressure on other routes that are more directly linked to future development areas. This proposal will, however, require significant additional study.
- The improvement of currently inadequate roads leading to National Routes.
- Local road improvements and traffic management measures will also be required throughout the Greater Dublin Area, but with the definite objective of relieving local difficulties rather than providing extra capacity.

Extension of DTI Area

Consideration is currently being given to extending the area covered by the Dublin Transportation Office and hence by the current and future reviews of the Dublin Transportation Initiative. It is clear from the discussion of the transportation requirements arising from the strategy that considerable further examination is required of a range of proposals and concepts designed to meet the needs of the future. The DTO will have an important role to play in this regard, and consideration should be given to extending the area covered by the DTO to include all, or most, of the Greater Dublin Area.

SANITARY SERVICES INFRASTRUCTURE

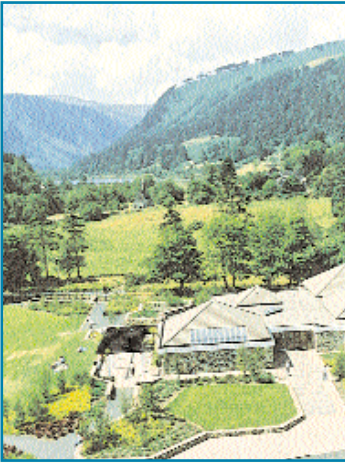
The further development of the Greater Dublin Area requires the implementation of a number of major wastewater treatment schemes that are currently in planning or underway and that are required both to facilitate future development and to meet environmental standards. In addition, improvements to the overall water supply situation and to wastewater collection will be required.

Metropolitan Area

The principal schemes required for the Metropolitan Area include:

- The completion of the expansion proposals for the Ringsend Plant as part of the Dublin Bay Project, together with other aspects of the project, including the northern fringe sewer.
- Expansion of the Swords and Leixlip wastewater treatment plants and upgrading of the Malahide plant.
- The provision of an enlarged treatment plant at Shanganagh, to serve parts of Dun Laoghaire-Rathdown and the Bray area of north Wicklow.

The population levels envisaged for South Dublin and Fingal South will require additional trunk sewer capacity. Significant measures to replace older, and now inadequate, sewerage systems will also be required.



Additional water supplies for the Metropolitan Area, through the implementation of the current Leixlip plant expansion and of the augmentation proposals for Ballymore-Eustace will also be required. Furthermore, the continuation of the current conservation programme will be essential as will the continuous monitoring of its performance.

Hinterland Area

Additional sanitary services infrastructure provision will also be required in the Hinterland Area to meet existing and future local need, including:

- Additional water supplies to parts of the Hinterland Area, especially in those areas currently dependent on supply from the River Liffey.
- The provision of new wastewater treatment plants at Balbriggan-Skerries and Kilcoole and upgrading of the plants at Navan, Osberstown and Wicklow.
- Consideration of the provision of future water supplies to the north Fingal area.

SOCIAL, EDUCATIONAL AND RECREATIONAL INFRASTRUCTURE

The requirements for major healthcare and third-level educational facilities will be a matter for consideration by the relevant authorities. However, given the anticipated scale of growth in the Greater Dublin Area, it is likely that additional provision will be required in both these areas during the timescale covered by the Guidelines.

Future provision of major educational and healthcare facilities should be located so as to re-inforce the overall strategy. Thus, facilities should be located at sites that are well served by public transport in the Metropolitan Area and at the 'development centres' in the Hinterland Area. Where possible, new third-level educational facilities should be located to avail of, counter-flows on the public transport network.

Recreation

A consequence of the strategy to concentrate development into the Metropolitan Area and into 'development centres' in the Hinterland Area will be to increase overall development densities and to reduce the amount of undeveloped land, such as institutional properties. The relative importance of recreational facilities will increase, due to the increase in population and changes in lifestyle that emphasise recreational activities to a greater extent, whilst land available for recreational uses could decrease, unless specific provision is made.

It will be important to ensure that adequate recreational facilities are available in conjunction with, or even ahead of, new housing development. In particular, provision should be made for both local and regional scale parks, where these do not already exist, and the incorporation of a variety of active and passive recreational opportunities.

In addition to outdoor recreational facilities, there is a demand for high quality indoor recreational facilities both to meet current demand and to facilitate future population growth. In line with the strategy, these facilities should be located where they can be adequately served by public transport.

STRATEGIC GREEN BELT AREAS

At the present time, where 'green belt' policies are included in Development Plans, they serve primarily to separate specific settlements with the objective of retaining an individual identity for each settlement. Such 'green belts' therefore tend to be relatively limited in extent.

A fundamental principle of the strategy is the concentration of development into the Metropolitan Area and into the identified 'development centres' in the Hinterland Area. This strategy implies that development elsewhere should be primarily to meet local, rather than regional, needs. In particular, sporadic and dispersed development is regarded as unsustainable, and should be subject to strict control.

A consequence of the strategy is that large parts of the Greater Dublin Area will require to be protected from development, other than that necessary to meet local needs. This need for protection will be greatest close to the Metropolitan Area and between that area and the principal 'development centres' in the Hinterland Area.

It is, therefore, proposed that 'Strategic Green Belt' areas be identified in the appropriate Development Plans. Land use within these areas should be restricted to that compatible with the objectives of concentrating development into the Metropolitan Area and the 'development centres' and securing a clear distinction between urban areas and rural areas.

Land uses in the Strategic Green Belt areas will, therefore, be primarily rural and include agriculture, forestry and similar activities. Leisure and recreational activities, especially those requiring extensive areas of land can also be accommodated in these areas. Other forms of development, including housing and employment activities, should be restricted to local needs only.

Principal Infrastructure Requirements

Many of the principal projects required to implement the strategy are already committed or in planning. Others are proposals already in circulation, whilst some arise from the development of the strategy itself. The principal infrastructure requirements are listed in Tables 9.4 to 9.6. In addition, there will be a significant number of smaller projects at a more local level.

Some of the listed projects are conceptual at this stage and will require additional detailed study of their appropriateness and feasibility including on-going operational costs.

Very many of these projects will be required in any event. The strategy provides a framework for the projects, thereby ensuring that the investments provide a more efficient overall return.



Table 9.4 Principal Public Transport Infrastructure Requirements

Project	Status	Need	Indicative Cost	Principal Agencies
Provision of Park and Ride Schemes	Current	Essential to strategy	£1 million per site	DTO; LA; DB; CIE
DART extensions to Greystones and Malahide	Current	Essential to strategy	£20 million	DTO; CIE
Implementation of QBC's	Current	Essential to strategy	£100 million	DTO; LA; DB
Upgrading of rail line to Maynooth	In planning /committed	Essential to strategy	£25 million	DPE; DTO; CIE
City centre re-signalling	In planning	Essential to strategy	£5 million	DPE; DTO; CIE
LRT routes to Sandyford, Tallaght, Airport/Swords	In planning	Essential to strategy	£400 million	DPE; DTO; CIE
Heavy Rail Link to Airport	Proposed	Major benefit to strategy	£150 million	DPE; DTO; CIE
City Centre orbital public transport	New Proposal	Major benefit to strategy	£20 million	DPE; DTO; CIE
Additional resignaling through city centre	New Proposal	Potential benefit to strategy	£100 million	DPE; DTO; CIE
Additional rail link through city centre	New Proposal	Potential major benefit to strategy	£70 million	DPE; DTO; CIE
Additional improvement of suburban rail services to Heuston and via Phoenix Park to Connolly	New Proposal	Potential major benefit to strategy	£10 million	DPE; DTO; CIE
Separation of inter-city suburban trains	New Proposal	Potential benefit to strategy	£100 million	DPE; DTO; CIE
Additional improvements to bus services	New Proposal	Essential to strategy	£50 million	DPE; DTO; DB
Inland rail route to Navan	New Proposal	Potential major benefit to strategy	£80 million	DPE; DTO; CIE; Private Sector
Internal public transport in 'development centres'	New Proposal	Major benefit to strategy	£10 million	DPE; DB; Private Sector

Table 9.5 Principal Road Infrastructure Requirements

Project	Status	Need	Indicative Cost	Principal Agencies
M50 Completion	Current	Essential to strategy	£100 million	DoELG; NRA; LA; DTO
Port Access Tunnel	Committed	Essential to strategy	£180 million	DoELG; NRA, LA; DTO
Completion of M1	Committed	Essential to strategy	£80 million	DoELG; NRA; LA; DTO
N2 Dual Carriageway to Ashbourne	In planning	Benefits strategy	£15 million	DoELG; NRA; LA; DTO
N3 Dual Carriageway to Navan	In planning	Essential to strategy	£80 million	DoELG; NRA; LA; DTO
M4 Extension	In planning	Benefits strategy	£60 million	DoELG; NRA; LA; DTO
M50 Additional Improvement Measures	Proposal	Essential to strategy	£50 million	DoELG; NRA; LA; DTO
Swords-Airport to Mulhuddart to Tallaght	Proposal	Essential to strategy	£80 million	DoELG; NRA; LA; DTO
M7 Dublin-Naas Motorway	Proposal	Potential benefit to strategy	£250 million	DoELG; NRA; LA; DTO
Southern Port Access Route	Proposal	Potential benefit to strategy	£200 million	DoELG; NRA; LA; DTO
Outer orbital route in Hinterland Area	Proposal	Potential benefit to strategy	£150 million	DoELG; NRA; LA; DTO

Note: Indicative costs do not include for land acquisition.

Table 9.6 Principal Wastewater Infrastructure Requirements

Project	Status	Need	Indicative Cost	Principal Agencies
Ringsend WWTP and Dublin Bay Project	Current	Essential to strategy	£200million	DoELG; LA
Swords WWTP upgrading	In planning	Essential to strategy	£10 million	DoELG; LA
Malahide WWTP upgrading	In planning	Essential to strategy	£8 million	DoELG; LA
Balbriggan-Skerries WWPT	In planning	Essential to strategy	£8 million	DoELG; LA
Wicklow WWTP upgrading	In planning	Essential to strategy	£6 million	DoELG; LA
Leixlip WWTP upgrading	In planning	Essential to strategy	£10 million	DoELG; LA

Table 9.7 Principal Water Supply Infrastructure Requirements

Project	Status	Need	Indicative Cost	Principal Agencies
Leixlip water supply augmentation	Current	Essential to strategy	£42million	DoELG; LA
Continuation and monitoringconservation programme	Current/ Proposed	Essential to strategy	£36 million	DoELG; LA
Ballymore Eustace water supply augmentation	Proposed	Essential to strategy	£42 million	DoELG; LA
Vartry (WT) upgrade	Proposed	Essential to strategy	£28 million	DoELG; LA
Ballyboden (WT) upgrade	Proposed	Essential to strategy	£10 million	DoELG; LA
Trunk mains	On-Going	Essential to strategy	£96 million	DoELG; LA
Distribution Network Rehabilitation	Current/ Proposed	Essential to strategy	£247 million	DoELG; LA
Above grounds assests	Current/ Proposed	Essential to strategy	£19 million	DoELG; LA
Local Distribution Projects	Current/ Proposed	Essential to strategy	£50 million	DoELG; LA

DoELG = Department of the Environment and Local Government

DPE = Department of Public Enterprise

LA = Local Authorities

NRA = National Roads Authority

DTO = Dublin Transportation Office

CIE = Coras Iompair Eireann

IE = Iarnrod Eireann

DB = Dublin Bus

- i A public transport system serving major development areas should have peak hour frequencies of approximately 10 services per hour and off-peak frequencies of at least 4 per hour.
- ii Whilst Drogheda is outside of the Greater Dublin Area, it is in such close proximity that its future development should be considered in the context of the Guidelines. The local authorities in the Drogheda area have an objective of further developing the town as a 'development centre' and, as such, it is included here. No increment of the population increase is allocated to Drogheda, which will generate its own future population, together with direct in-migration to the town.
- iii Transportation corridors are defined as corridors served by both a passenger rail line and a motorway or dual carriageway.
- iv Retail Planning Guidelines are in preparation concurrently with the Strategic Planning Guidelines, and this document provides a broad indication of the requirement for additional retail space in the Dublin Metropolitan Area.





chapter | 10

next steps

10. NEXT STEPS

The strategy outlined in Chapter 9 will be implemented primarily through:

- *the Development Plan process; and*
- *the provision of major infrastructure.*

Each of the Development Plans in the Greater Dublin Area will require reappraisal in the light of the strategy and, if necessary, be amended to accord with it.

Some of the major infrastructure projects required for the implementation of the strategy are in progress or are at an advanced stage of planning. It is essential that momentum in the implementation of these schemes, and of the other schemes required by the strategy, be maintained and that decisions are taken as quickly as possible on all of the required actions.

The implementation of the strategy and the successful realisation of the objectives, will require continuous monitoring. A monitoring structure is therefore recommended.

A range of other recommendations arising from the preparation of the Guidelines is given in Appendix 6.

The strategy for the future development of the Greater Dublin Area has been outlined in Chapter 9. The realisation of this strategy will take time and it must be appreciated that the necessary changes in the objectives and policies of each of the local authorities and other statutory agencies (where these do not correspond to the strategy) will take some time to put in place. This is particularly true of the Development Plan process, where the statutory requirements, coupled with the complex inter-relationship of many of the issues, do not allow for instant change.

The planning and lead-in times required for major infrastructure projects, together with statutory requirements for Environmental Impact Assessment, and the need for adequate levels of public consultation, must also be appreciated.

Nevertheless, it is important that progress with the implementation of the strategy proceeds as quickly as is practically possible. The pressure for development in the Greater Dublin Area and the extent to which current infrastructure is at, or over, capacity, point to the need for rapid decision-making and implementation. Moreover, as the Guidelines indicate, these pressures are likely to continue for the foreseeable future.

The implementation of the strategy will be achieved primarily through:

- The Development Plan process of the local authorities that will guide and control development throughout the Greater Dublin Area, particularly private sector development; and
- The provision of major transportation, sanitary services and other infrastructure that will be primarily undertaken by the public sector, possibly with increasing participation by the private sector.