

A blue-tinted photograph of a hand holding a pen over a document with a grid pattern. The hand is positioned in the lower right, with the pen tip pointing towards the center. The document has a grid pattern and some faint text. The background is a solid blue color.

chapter | 7

strategic models

7. STRATEGIC MODELS

Eight alternative strategic models were considered as a systematic means of assessing the potential of various approaches to the future development of the Greater Dublin Area. These were assessed against the set of criteria discussed in Chapter 6.

Broadly, the choice lies between concentration and dispersion of future development. Widespread dispersion and the concentration of development into a large number of centres are both unsustainable, would generate significant levels of additional travel and would not facilitate the development of a significantly enhanced public transport system. More concentrated development models better meet the requirements for sustainability but must be balanced against the need to provide choice and to spread economic development throughout all of the Greater Dublin Area.

PURPOSE OF MODELS

Eight alternative strategic models were developed and assessed. The models include:

- A: Continuation of Existing Trends
- B: Compact City and Towns
- C: New Towns
- D1: Transportation Corridors: Satellite Towns
- D2: Transportation Corridors: Smaller Centres
- E: Dispersion
- F: Economic Corridors
- G: Outer Catchments

The purpose of the models is to explore and assess a range of alternative approaches to the planning and development of the Greater Dublin Area. The models are, of necessity, broad-brush in nature and future population targets for each area were not considered.

Each model was assessed against the range of criteria discussed in Chapter 6. The models and the outcome of the assessment are summarised below. The models with the greatest potential were further developed into strategic options, which are discussed in Chapter 8.

SUMMARY OF MODELS

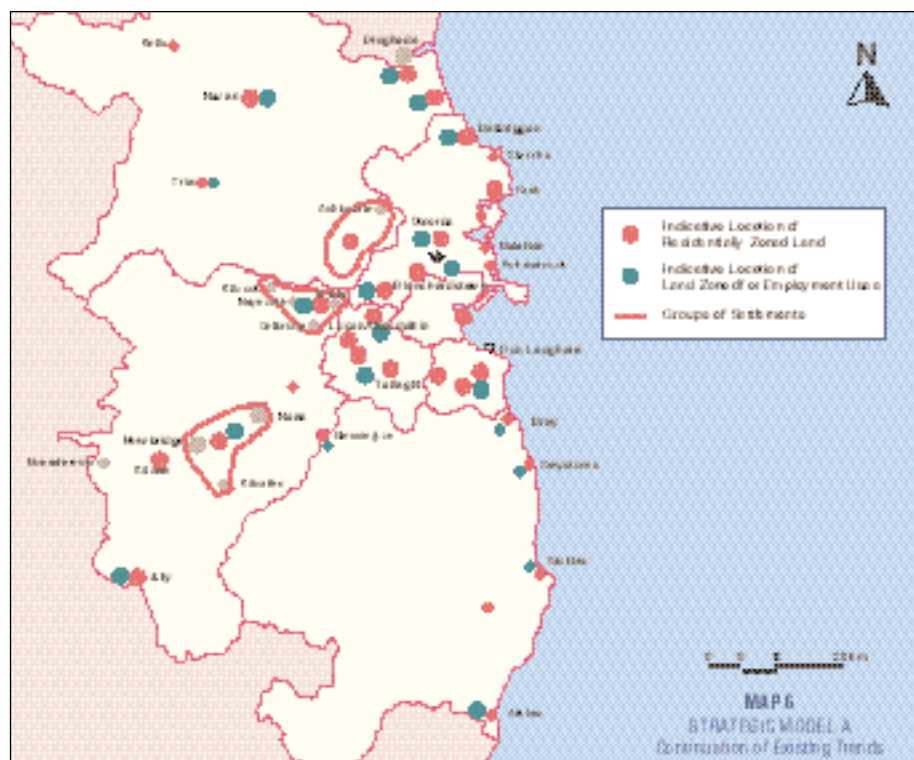
A. Continuation of Existing Trends

This strategic model indicates the impact of continuing current policies and trends. Much of the current development in the Greater Dublin Area is of a form that generates extensive use of the private car. The principal pattern is one of relatively low density housing, laid out on cul-de-sac roads in estates dispersed throughout the Greater Dublin Area. The location and pattern of development, which would result from this model, provides a baseline against which the other strategic models can be assessed. It is also useful in that it provides an indication of how current patterns and trends in development meet the relevant criteria (see Map 6 - Strategic Model A).

The attractiveness of this model is based on the fact that it requires no major changes in policy direction. It is a low risk scenario where longer-term investments can be held until the need is established. Continuing the existing pattern of development would also ensure a reasonable spread of development throughout the Greater Dublin Area.

One of the main problems with this model is that it does not accord with the principles of sustainable development. It does not contribute towards consolidating the existing built-up area to a more compact city nor does it favour public transportation. As it does not favour public transport or contribute to reducing the need to travel, transportation difficulties are likely to remain if this approach is adopted. Whilst not threatening specific designated amenity and heritage features, it will result in the loss of significant areas of rural land through a continued pattern of urban sprawl.

The model has limited value, and in particular, does not contribute to a clear overall vision for the Greater Dublin Area. However, during the initial period covered by the Strategic Planning Guidelines, this pattern of development is likely to continue, and this model, possibly with some policy changes, may effectively form the first phase of a strategy. In addition, any strategy that seeks to make good utilisation of existing and 'in-planning' capacities in wastewater treatment will require to incorporate elements of this model.



B. Compact City and Towns

This strategic model indicates the impact of developing a compact city and building up existing large towns. This model of development is being followed in many parts of Europe. The concept of the Compact City promotes higher density, mixed land use and public transport. This type of urban form avoids the waste and sense of fragmentation caused by the continuous dispersal of economic activity.

In this model, the maximum amount of new development is accommodated within the existing built up areas of Dublin and of Swords, Bray, Naas and the north Kildare towns as the largest settlements in the Greater Dublin Area (see Map 7- Strategic Model B).

The principal advantage of this model is that it is in keeping with the principles of sustainability and the policy direction emerging from the European Spatial Development Perspective. It would facilitate greater use of public transport and would reduce the overall need to travel.

There are, however, some difficulties associated with this model. The Greater Dublin Area's historic pattern of low-density development makes this a difficult model to achieve over any reasonable timeframe. Implementing the major changes required to realise the model may, therefore, be unattainable in the timescale covered by the Strategic Planning Guidelines and would require significant cultural and attitudinal changes. High initial investment would also be required to secure public transport and other necessary infrastructure.

Also of significance is that this model would not greatly facilitate the on-going economic development of the Mid-East Region, an area that has demonstrated a high capacity for growth in recent years.

On its own this model may not be suitable to deal with the anticipated growth of the Greater Dublin Area. Nevertheless, it may be prudent to seek to include an element of this model in any selected option and to aspire towards more compact settlements in the long term.



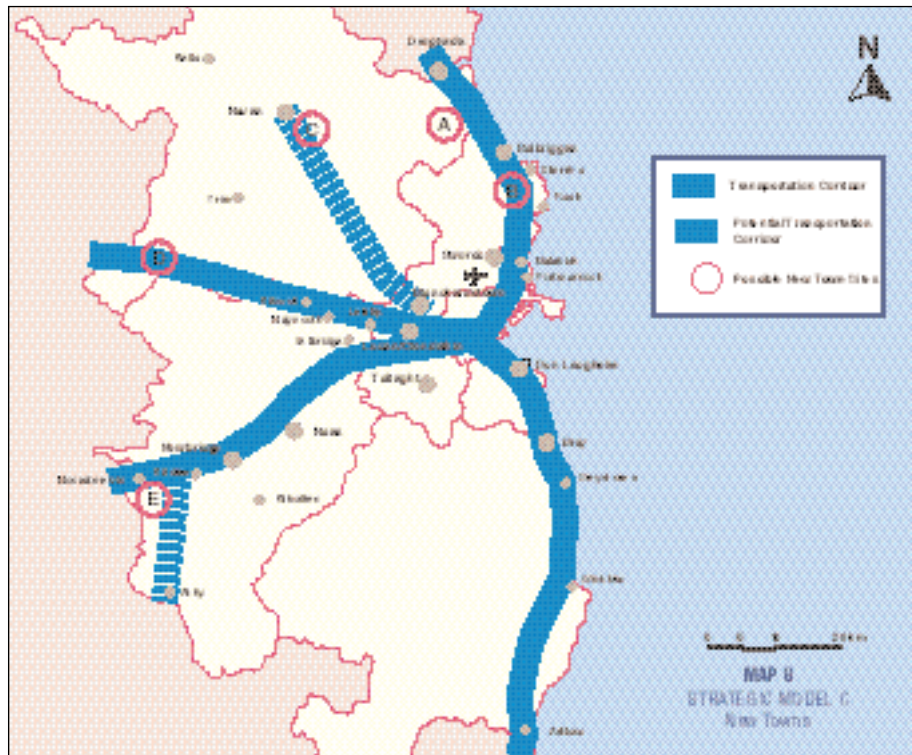
C. New Towns

The building of new towns is a classic response to rapidly growing city regions and offers advantages in reducing impacts on existing settlements. New Towns also overcome constraints on the development of existing centres.

This strategic model seeks to accommodate a significant proportion of future growth in 2 or 3 new towns, each with a population of 40,000 to 50,000. These towns would be located at an adequate distance (>40 km) away from Dublin to ensure a good level of self-sufficiency (see Map 8 - Strategic Model C).

This model has a number of advantages. If adopted, this development model, provided that the necessary infrastructure was included, would create sustainable settlements. As growth is confined to a small number of settlements, it reduces the impact of growth in other areas. The model also facilitates the development of an effective public transport system within the towns and between the new towns and Dublin.

The main disadvantage of the new town model is that it is a very high risk option. It would require high levels of initial investment and is dependent on reaching target populations within a reasonable timescale. The development of a small number of new towns offers the population little choice in where they will live. There can also be problems associated with achieving a balanced social mix in new towns.



D1. Transportation Corridors: Satellite Towns

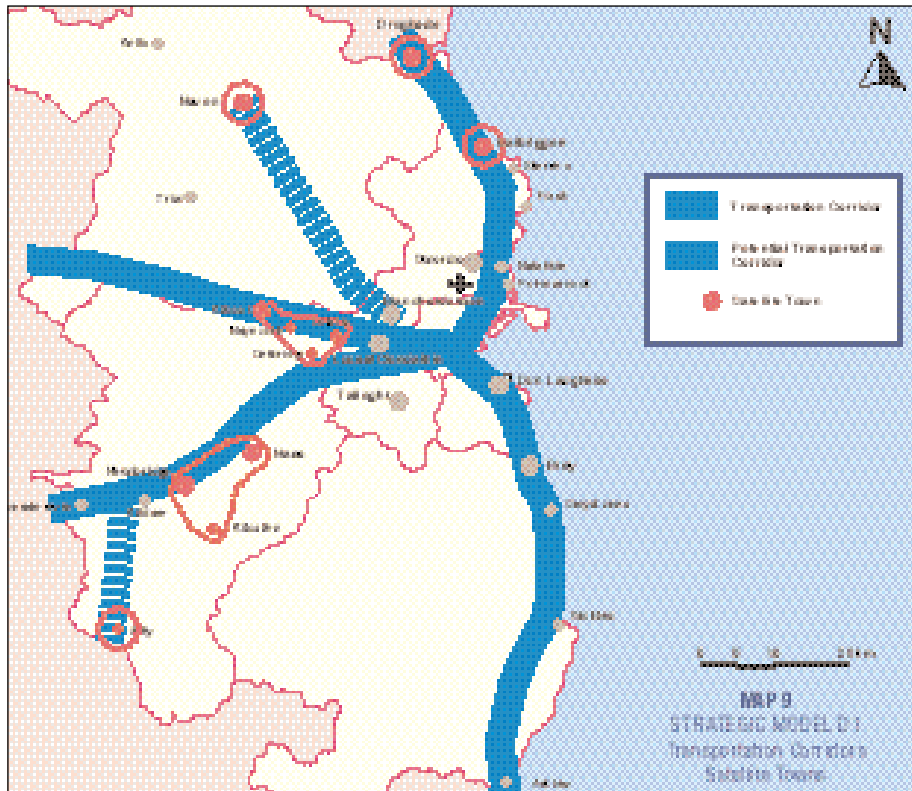
This strategic model involves the development of a number of selected centres along existing and proposed major transportation corridors in the Greater Dublin Area. It allows for high-density development due to the public transport links and proposes the concentration of development in a limited number of centres only. This will allow the development of self-sustaining centres, incorporating employment, retailing and social services.

This model envisages the development of satellite towns at Balbriggan, Navan and Naas/Newbridge, along with the consolidation of the Maynooth/Leixlip and Celbridge area. Athy is also identified as a possible later phase satellite town. All of these centres, with the exception of Naas and Navan, are on both road and rail corridors. Naas is served by rail at Sallins and better internal public transport links within the settlement might encourage greater use of this mode (see Map 9 - Strategic Model D1).

The model has considerable attractions in reducing the continuing sprawl of the existing built up area. It accords with the principles of sustainability and promotes the use of public transport and higher-density development. Only a limited number of

centres would be developed in this model and the provision of a range of employment, retail and social facilities would contribute towards the creation of sustainable and balanced communities. As the centres are distributed evenly throughout the Greater Dublin Area it would result in a good regional spread of activity.

The success of this model depends on significant investment in public transport and the creation of an efficient public transport system. It also provides only a limited choice in location.

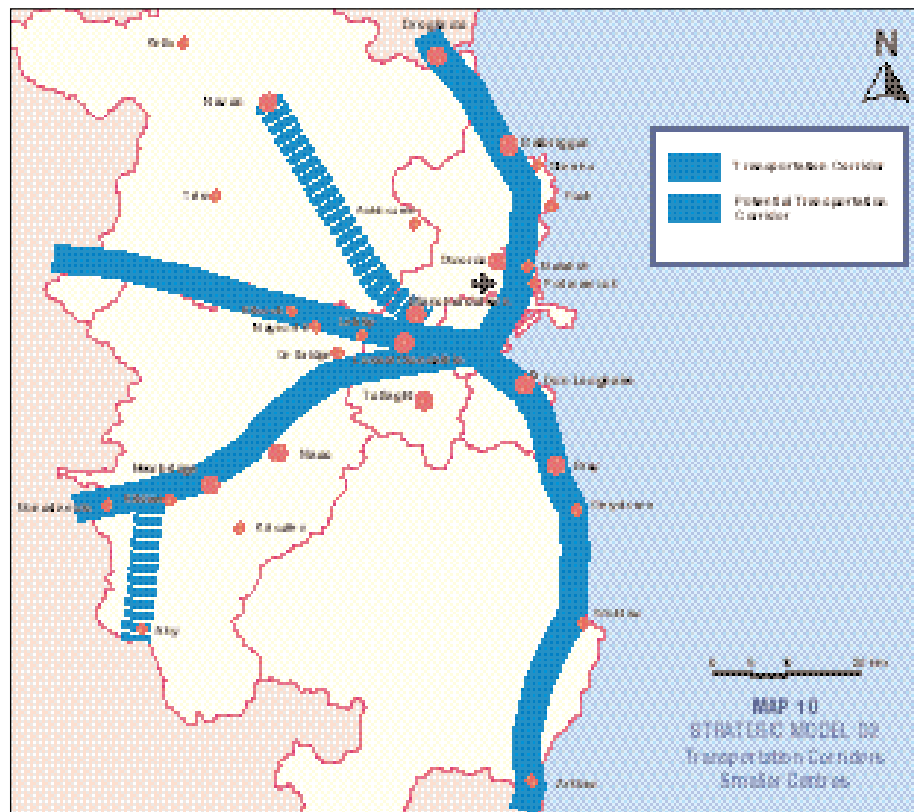


D2. Transportation Corridors: Smaller Centres

This strategic model involves the development of a series of small centres on the transportation corridors. No one centre would dominate in this model. This would result in a spread of both the benefits and the impacts of development. The centres would be served by good public transport links to Dublin city centre and also to other employment centres (see Map 10 - Strategic Model D2).

One of the advantages of this model is that development is spread throughout the Greater Dublin Area. It also utilises the transportation corridors and facilitates public transport. As a large number of centres will be developed there will be greater choice for the population in terms of location.

The main difficulty with this model is that the expansion of a large number of settlements, even though located on public transport links, is not sustainable. The small centres would inevitably become dormitory towns and villages and could not become self-sustaining in terms of the necessary services and facilities required by the population. Development along these lines will also result in a poor demarcation between urban and rural areas. Overall, this model has limited potential.



E. Dispersion

Historically, development in the Greater Dublin Area has tended to spread over a wide area. This strategic model considers the continued dispersal of development throughout the Greater Dublin Area. It has many similarities to the Continuation of Existing Trends model (see Map 11 - Strategic Model E).

In this model, future development is dispersed to all existing centres, regardless of their access to the public transport network.

The main advantage of this model is that it builds on the existing pattern of development and will therefore require no major policy changes. It is also a low risk option as any longer term investments can be held until their necessity is established.

However, the model does not accord to the principles of sustainability. It is not based on public transport and will not facilitate higher density development. As many centres will not be adequately served by public transport, the private car will be relied upon. This will further continue the pattern of urban sprawl and ribbon development already in existence along main routes and contribute to further traffic difficulties. In addition, there will be no clear demarcation between urban and rural areas.

The model does not contribute to a clear vision for the Greater Dublin Area and has little to offer.



F. Economic Corridors

This strategic model involves building on the strengths and success of the existing economic corridors in the Greater Dublin Area, all of which have a demonstrated capacity to attract major levels of economic activity. It is very similar to D1 Transportation Corridors - Satellite Towns, but concentrates development into a smaller area.

This model would concentrate development along the following economic corridors: the Dublin - Belfast corridor, the Blanchardstown-Mulhuddart-Leixlip-Maynooth area, the Naas-Newbridge axis and the Wicklow Coastal area (see Map 12 - Strategic Model F).

There are a number of advantages to this model. It adheres to the principles of sustainable development, is based on public transport and facilitates higher density. As only a limited number of centres will be developed, economic benefits will not be spread too thinly. This will ensure the viability of these towns.

However, the model has the potential for 'over-development' which could result in congestion, ultimately limiting the economic attractiveness of the areas. It is also focused on a limited number of locations and has limited potential to contribute to balanced regional development.



G. Outer Catchments

The catchment of the river Liffey is coming under increasing pressure and has limited potential to accommodate further discharges without compromising water supply. This model seeks to transfer some of the development pressure from the Liffey catchment to areas without these difficulties. The catchments of the Boyne and Barrow have been identified as having capacity to cater for additional development. Development along the coastal strip can be drained directly to the sea, following adequate treatment, and this potential is also built into the model.

This model would involve the major expansion of towns in the outer catchments, notably Navan, Kildare/Monasterevin, Athy and the environs of Drogheda, with more limited development in towns along the coast (see Map 13 - Strategic Model F).

The main attraction of this model is that it reduces pressure on existing heavily loaded areas. It involves the building up of a limited number of existing centres. This will ensure that development will not be spread too thinly.

The principal difficulty with the model is that potentially there could be huge impacts on coastal areas, which are in themselves very fragile. Also, much of the development will be located at considerable distance from Dublin and without the necessary investment in public transport there would be an increase in traffic congestion.

Table 7.1 Summary Appraisal of Strategic Models

	Continuation of Existing Trends	Compact City and Towns	New Towns	Transportation Corridors: Satellite Towns	Transportation Corridors: Smaller Centres	Dispersion	Economic Corridors	Outer Catchments
Facilitation of public transport	•	√	√	√	√	x	√	√
Balance of public and private transport	x	√	√	√	√	√	√	•
Reduction in the need to travel								
-Employment	x	•	√	√	x	x	√	√
-Shopping and social facilities	x	•	√	√	x	x	•	√
Utilisation of existing capacity								
-Zoned lands	√	•	x	•	√	√	√	√
-Sanitary services	√	√	x	•	√	•	√	•
-Transport	√	√	•	•	•	•	•	•
Use of under-utilised land								
-Brownfield site	√	√	x	√	x	x	√	•
-Low density residential areas	x	•	x	√	x	x	√	x
Facilitation of economic activities	•	•	√	√	x	x	√	√
Facilitation of higher residential densities	•	√	√	√	√	•	√	√
Facilitation of mixed uses	•	√	√	•	√	•	√	√
Equity and affordability								
-Integration	•	•	•	•	x	•	•	√
-Affordability	x	x	√	•	•	•	x	√
Supports urban/rural demarcation	x	√	√	√	x	x	√	√
Conservation of high quality agricultural land	•	√	x	x	x	x	•	•
Protection of heritage and amenity	•	√	√	√	•	•	•	√
Contributes to regional balance	x	x	√	√	x	x	x	√
Relatively low cost	•	x	x	x	•	√	x	x

- √ Accords well with the criteria
- Accords moderately with the criteria
- x Does not accord with the criteria

The development of new towns is an attractive option, reducing impacts on existing centres and providing an opportunity to develop settlements in line with the latest thinking on sustainability. However, it is difficult to achieve a good age mix in such towns and very high initial investment is required to avoid the problems experienced with the three western towns of Tallaght, Lucan/Clondalkin and Blanchardstown (delays in the provision of services such as high quality transport, retailing, etc.). New towns are also a high-risk strategy, as any downturn in the levels of projected growth may compromise their completion and tie up large investments with little return. Nevertheless, the development of one or two smaller new towns, possibly with major private sector involvement, is worth further consideration.

The model of dispersion of development offers little of benefit and does not accord with the dictates of sustainability. The economic corridor model has no advantages over the transportation corridor models. The potential advantages of the outer catchments are worth considering in any option that seeks to establish major settlements at some distance from the built up area of Dublin.

Finally, the Continuation of Existing Trends model incorporates significant levels of development in the transportation corridors and this aspect of the model may provide a useful initial phase of development for the Greater Dublin Area, without the necessity to revise current policies in the immediate future and providing time for the establishment of infrastructure (and policies) to facilitate the implementation of an alternative strategy.