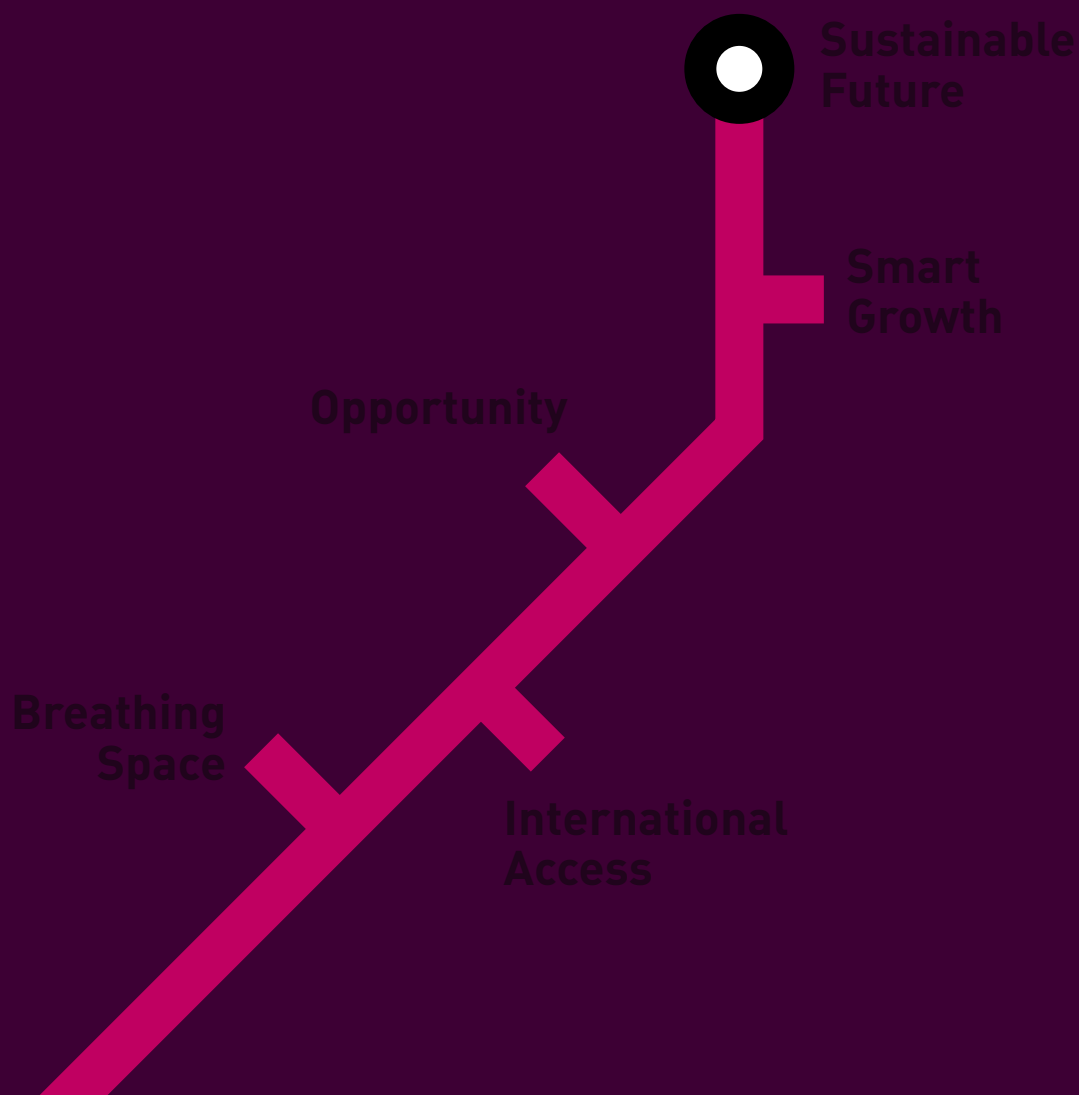




MetroNorth

A link to the future

Fingal County Council in association with
Dublin City Council / Dublin Airport Authority / Railway Procurement Agency



MetroNorth

A link to the future

February 2005



Introduction	7
Executive Summary	9
1 From the European to the Local Context	13
<i>Europe and the World</i>	<i>13</i>
<i>Ireland</i>	<i>14</i>
<i>The Dublin Region</i>	<i>16</i>
<i>Swords</i>	<i>18</i>
2 MetroNorth	25
<i>Proposed Route</i>	<i>26</i>
<i>Catchment Area</i>	<i>27</i>
<i>Relative Benefits</i>	<i>27</i>
<i>The Benefits</i>	<i>28</i>
<i>Costs /Funding Strategy</i>	<i>33</i>
3 Conclusion	38
APPENDICES	
A Demographics	40
B Economic Trends	43
C Dublin Airport	45
D Swords	52
E Costs & Funding Strategy	60

MetroNorth

A link to the future

Dublin's success as a leading European city comes with many challenges. Progress puts greater demand on our land, infrastructure and resources and it challenges us to manage this growth.

MetroNorth is a link from Dublin city centre to North Dublin servicing the airport and Swords.

However MetroNorth is more than a link between the capital city and the nation's primary airport – it is a link to the future: a future that sees the airport and north Dublin developed to the best principles of sustainable growth to meet challenges facing the city region; a future that ensures Ireland remains within easy reach of Europe and the wider global economy; a future that responds to the demands of working and living in the Greater Dublin Area and a future that offers opportunity, choice and prosperity for our children.

The chance is available now to introduce MetroNorth in the best way and deliver all these benefits. This window of opportunity will only remain open for a short time and we must decide now if we wish to make this link to the future.

Executive Summary

Context

The challenge facing the Dublin City region is to consolidate the strong foundation put in place by recent economic success ensuring sustainable economic prosperity and quality of life for future generations. To manage and maximize sustainable growth, the opportunities need to be understood in their broader context.

International	<i>City regions such as Dublin are the drivers of economic success and in response to the need for smart growth of these centres conurbations are being planned and developed.</i>
National	<i>As an island on the edge of Europe Dublin Airport, and the link it provides to Europe and the World, is vital to Ireland's economic success. The transport void that currently exists around the airport is a threat to the future of the airport and in turn the national economy.</i>
Regional	<i>Dublin City Region's increasing population and decreasing household size is putting additional pressure on the need for new housing.</i>
Local	<i>Currently the Swords configuration offers an ideal location to address many of the pressures facing Fingal and the Dublin City Region. This configuration cannot be maintained indefinitely and the chance now exists to maximise the opportunity presented.</i>

Currently Dublin is the only capital city airport in western Europe not serviced by metro or rail. By 2010 projections show the road-based transport will not cope with the growth of Dublin Airport, our National Gateway. MetroNorth is the only proposal that addresses this particular transport need while enabling sustainable development in line with the National Spatial Strategy.

Communities or Commuters?

The need for quality, affordable housing and reasonable transit times are at the heart of the challenge facing the Dublin City Region. North Dublin offers the best opportunities for growth in the Greater Metropolitan area. Fingal's population is expected to grow by 56% between 1996 and 2010. Due to decreasing household sizes this equates to a 100% increase in the number of dwellings.

The opportunities presented are complementary: We can maintain the Airport gateway while providing sustainable communities where they are most needed.

Why Metro?

Metro's strength over bus and other rail options is its capacity, speed and reliability. Currently the whole of north Dublin sits in a transport void. Dublin Airport is located in the centre of this void. The proposed route of MetroNorth serves the greatest number of people, provides an essential link to the Airport and enables smart growth for Swords and its hinterland.

Why Metro to Swords?

The city centre route can develop a limited number of brown-field sites. To yield the best planning and infrastructure value, the City to Airport link needs to continue to Swords.

Green Belts and flight paths constrain development on the east-west corridor from Sea to Airport. The lands to the north hold the opportunities of development levies and ease of procurement. The provision of a terminus at Swords will include park and ride, bus interchange and a rapid rail access to a wide catchment.

The town of Swords offers a potential for smart growth while avoiding sprawl. The brownfield sites within the metro catchment can be re-invented to an increased density. This will allow the critical mass required for the provision of local schools, medical facilities, parks and amenities without gridlock.

Viability

A successful cost benefit analysis has been carried out by the Rail Procurement Agency for MetroNorth. As a terminus Swords offers an improved cost benefit ratio for the entire line. This arises through:

- > Alternative and improved Airport access
- > Commuters on rail not road
- > Social and Community benefits

MetroNorth can provide a service to 145,000 people within 10 minutes walking distance along it's route. It can remove traffic from the roads and serve a projected 60% of Airport users. This is essential for national economic growth if the Airport expansion is to be supported and our national gateway is to remain firmly open. A Cost/Funding Strategy is detailed in Appendix E of this document.

Conclusion

The opportunity provided by MetroNorth addresses the realities of people's lives. It is a necessary long term solution at a critical stage in our capital city's growth. The impacts are only positive and have been welcomed through the consultation process. MetroNorth is a means to an end – the end being a thriving region within a thriving European economy that offers opportunity, choice and prosperity to future generations.

1

From the European to the local context

1.1 EUROPE AND THE WORLD

As the economy of the European Union progresses a recognition has developed that it is the economic mass embodied in city regions, not nation states, that will be the driver of future economic success. The success of city region-based development brings with it a range of challenges – top among these being the ability to best manage the growth that comes with that success.

Urban sprawl is not a sustainable or desirable option. Conurbations created by effective transport links are allowing for smarter growth, healthier communities and effective use of limited resources.

Examples such as Oresund (Copenhagen/Malmö) and ‘The Delta Metropolis’ grouping in the Netherlands (Amsterdam/The Hague/Rotterdam/Utrecht) illustrate these strategies in action.

In the European model illustrating the development of such groupings Ireland, northern England and Scotland are grouped in the “Islands Region” with a strong link shown along the Dublin/Belfast corridor.

For an island nation the air and sea links that form these groupings have a strategic significance that is international. Twin challenges exist for these strategic pieces of infrastructure viz. –

Access to these assets must at all times be optimised, and those access routes must be the most effective possible for the greatest numbers of passengers and the greatest amount of goods to afford optimum value from those assets.

While developing the right transport links to the airport within the Dublin city region, there exists an opportunity to take advantage of the optimum delivery of these links so to maximise sustainable economic growth for that region.

Oresund

Copenhagen—Malmo
A bridge linking Copenhagen in Denmark and Malmo in Sweden has created a new and thriving economic zone which transcends national boundaries and encourages sustainable patterns of growth.



The Delta Metropolis

Amsterdam—The Hague—
Rotterdam—Utrecht
Effective transport links and enlightened planning allowed these cities to retain their respective characters while collectively ensuring the economic competitiveness of the region.



1.2 IRELAND

As volumes of airborne inbound and outbound travellers have increased, the transport infrastructure supporting the airport has come under increased stress to the point where our national competitiveness is being compromised.

Currently Dublin is the only capital city airport in western Europe not serviced by a metro or rail link.

Despite the significant recent and ongoing investment in road transport infrastructure in the immediate area, the road network around the Airport is already under stress. It is clear that road-based transport alone will not provide even the medium-term answer to coping with the growth of the national strategic asset that is the Airport.

Studies compiled in recent months for Fingal County Council illustrate that the M50 and M11 spine to the city are already under stress for significant lengths of the working day. This will remain the case post tunnel completion. The relief anticipated from the opening of the tunnel will not materialise as additional traffic destined for the port will then use these routes having been diverted from passing through the city.

Much of the existing local and regional highway network is currently operating at or beyond capacity. Significant improvements, both to the highway infrastructure and public transport network, will be required to address the forecast increases in airport use.

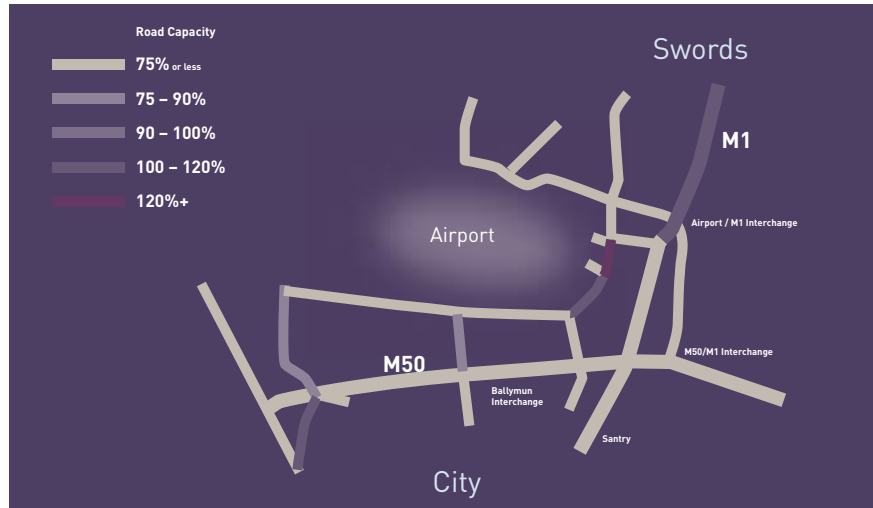
Given the importance of Dublin airport to the national, regional and local economy, it is essential that achievable capacities in the transport and road infrastructure should be allocated first and foremost to future development at the airport.

Without the metro the road system will not cope with forecast airport growth, and certainly not with additional commercial development.

The overall priority must be to reserve capacity for the access needs of the Airport – which is not only an important national asset, but also a major source of employment growth potential in its own right.

Road Stress Levels 2004

Analysis shows that the new M1 is already under stress from traffic as it approaches the airport turnoff to the north.



Road Stress Levels 2010 Without the Metro

Projections show that the vital access roads to the airport will not withstand any future exceptional/singular event. Airport access and exit would be severely compromised.



'WITHOUT THE METRO THE ROAD SYSTEM CANNOT COPE WITH FORECAST AIRPORT GROWTH, AND CERTAINLY NOT WITH ADDITIONAL COMMERCIAL DEVELOPMENT.'



Without the Metro there will be:

- › Unconstrained growth of car movements (except by congestion) to and from the airport resulting in serious congestion on the M1 and M50 with long delays for passengers and workers at the airport and those travelling on the extended road network.
- › Increases in the demands for car parking at the airport and the consequent need to provide larger car park facilities.
- › A need for serious limitation to future development in Fingal.

1.3 THE DUBLIN REGION

Dublin city and the surrounding region has been at the heart of Ireland’s economic success. It is however undergoing massive change as it responds to the pressures of economic growth, changing demographics, public service delivery, business competitiveness and the support of healthy, thriving communities.

The need for quality, affordable housing and reasonable transit times are at the heart of this challenge.

The National Spatial Strategy identifies the Dublin/Belfast economic corridor as a key National Transport Corridor, which is also classified as a strategic link of the ‘Islands Region’ in the European Growth Model. In addition, the Dublin Transport Office strategy: ‘A Platform for Change’ distinguishes the Metro between Dublin City and Swords town via Dublin Airport as a key link. The Regional Planning Guidelines the development of the Metro to Dublin airport is a Strategic Regional Priority in provision of public transport.

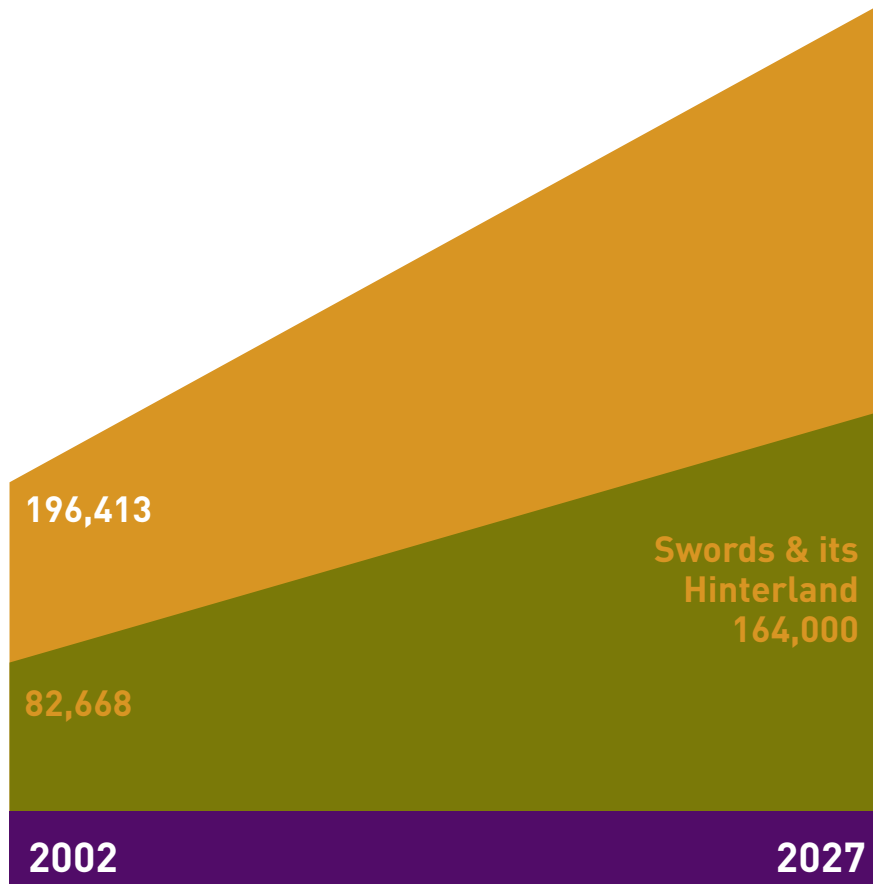
The importance of the Airport for the region justified an airport-oriented plan to be prepared by Fingal County Council, i.e. the South Fingal Planning Study, which is a major study of the long term development of Dublin Airport and Environs and the South Fingal Fringe. The study concluded that the introduction of a metro-type rapid transit link serving the airport and the region would:

- › ensure that the potential of the airport area and environs will most effectively be harnessed in the interests of the long term development of the area;
- › remove constraints and limits on economic development for the nation, city and region;

Population Growth

Fingal's population is projected to grow to over 400,000 by 2027 with a large proportion of this being accommodated by Swords and its hinterland.

Projected Population of Fingal 400,552



- > reduce serious congestion on the existing national road infrastructure;
- > remove early requirements for road pricing in order to maintain essential capacity on the city road network;
- > improve the quality of life for communities along the route, ensure less congestion, pollution etc; and
- > remove the requirement for massive additional investment in developing additional commuter bus services.

Fingal County Council has risen to the challenge of housing provision for the region. The annual number of new house starts achieved has addressed any supply-side deficit bringing stability to the housing market. The Council seeks to continue with this work, but the necessity for strategic investment in rapid public transport solutions has become essential.

Fingal's population is projected to grow by 56% to 250,000 between 1996 and 2010. Because of decreasing household size over that same time Fingal will need 100% more dwellings to house this growth in population.

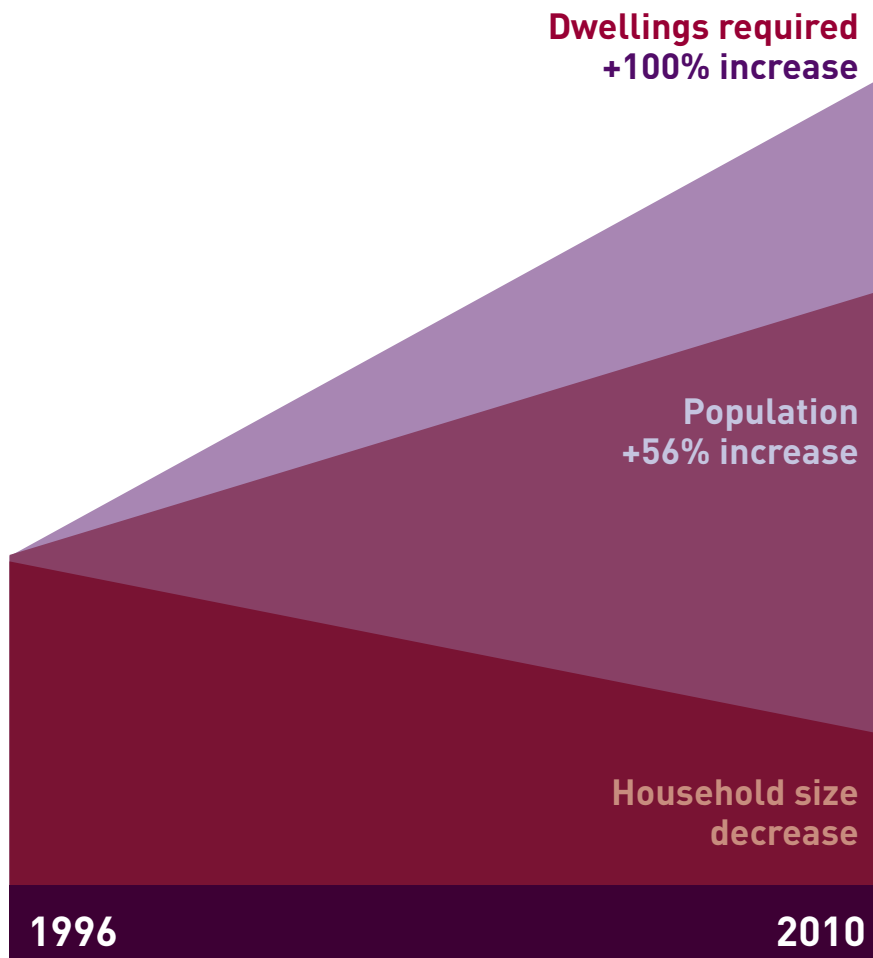
Projecting forward to 2027, Fingal will have a population of 400,000, with 162,000 living in the Swords/airport hinterland. However the latter is a conservative figure and with Metro in place a figure of 200,000 is possible. Timely planning can deliver optimum results for the city and region alike and ensure the best use of our national gateway.

In examining the case for rapid transit metro for the airport two options have been considered. The first option examined was the provision of the *City–Airport–City* link. The second was the *City–Airport–Swords–Airport–City* configuration.

The first *City – Airport – City* option provides a route that is predominantly underground serving existing city communities of whom only few have marginal access (Drumcondra station on the Maynooth line) to rapid transit. It will only be possible to develop a limited number of brown-field sites along this route so the potential for infrastructure-based development levies yield as a contribution to cost is marginal. New commercial or industrial lands may be developed north of the M50 between it and the airport, but due to the presence of the flight path from the cross-runway no new communities are possible here. In addition terminating the metro in the airport will make the airport a metro

Housing requirements

Because of decreasing household size Fingal needs 100% more new dwellings to house the projected growth in population between 1996 and 2010.



destination of itself adding to the traffic and parking problems already evident with it.

The second *City – Airport – Swords – Airport – City* configuration achieves benefits for the line that far outweigh the marginal (in relative terms) additional costs. The primary benefit will be the provision of a terminus, proposed to be north of Swords at a Lissenhall interchange, which will include a park and ride provision and bus interchange along the line within Swords. This will deliver the benefit of rapid rail access to a wide catchment. A strong airport employment link with Swords and the north county will reduce significantly the need for employee parking at the airport.

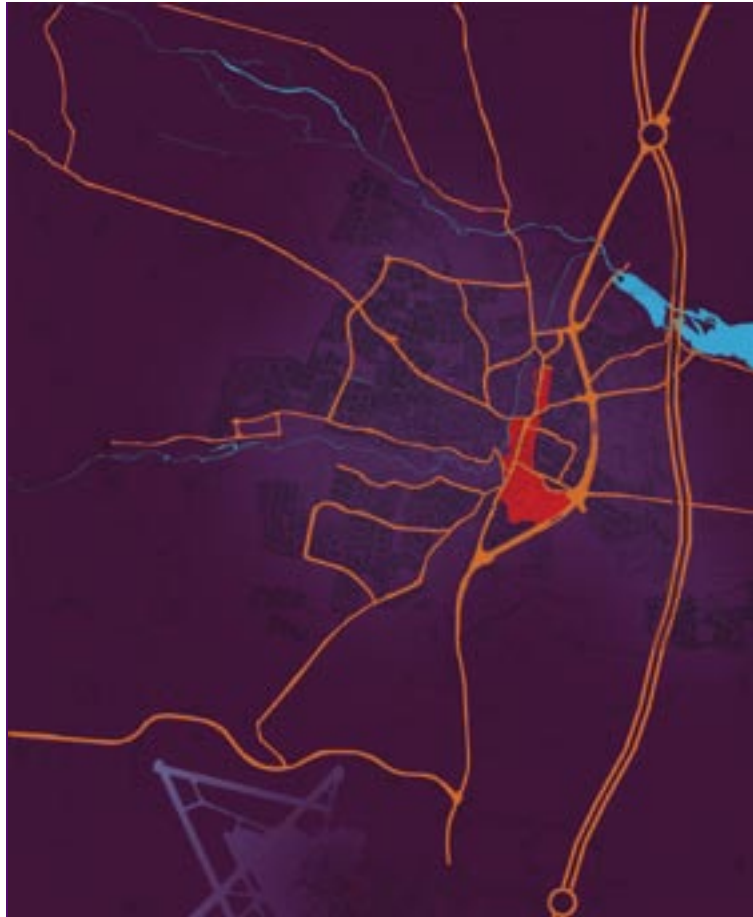
Development levies in support of the infrastructure are projected later here to raise half the additional cost of bringing the line an additional 6.5km to Lissenhall. Perhaps most importantly the opportunity that a metro line will bring to Swords is that of developing a real sustainable community with a life-work balance through smart planning, land use and development initiatives that can be pursued for our thriving nation. Capacity to best house the population needed to continue our national economic success will be realised in locations such as those that can become available through initiatives such as these.

1.4 SWORDS

Swords, with a current population close to 40,000, has the potential to provide the right environment from which to develop a smart growth strategy that encompasses the benefits of the kind of conurbation envisaged by the EU and set out in their “City Region” model above. In support of this the current and draft Fingal County Development Plan employs an Urban Development strategy based on a hierarchy of development centres wherein Swords is a designated main urban centre.

To date it has been difficult to plan concentrated development in the absence of transport services that have sufficient capacity without creating gridlock or promoting unsustainable development.

The existing Swords road network forces all traffic through the centre. Few cross-town routes exist. Public transport is compromised into cul-de-sacs with few long routes.



Existing land uses follow the incremental development of the town. Residential areas have relatively low density. There is a need to contain growth.



In Swords, where until recently the N1 traversed and divided the town, advantage can now be taken of a new reality. Any rail-based rapid transit route can use the old N1, where all the land from the airport, with the exception of circa 2.5ha, for a proposed distance of 6.5km is in public ownership.

As the natural hub for the north county, Swords has the facility to grow in a sustainable manner. Through the provision of a strong transport link it can reduce the stress on roads around the Airport, while providing housing and mixed development opportunities with the right critical mass to support third level education, health and other amenities.

The Fingal Development Plan and zoning around Swords can ensure that an opportunity can be assembled now to put in place a solution that is cost-effective and an enabler for the sustained growth and prosperity of Fingal, Dublin and Ireland.

The vision for Swords in the county Development Plan sees the town

- > Consolidating existing and future development within well defined town boundaries;
- > Providing for a much expanded civic, cultural, retail, commercial and employment base at a level appropriate for a vibrant major County town;
- > Developing high quality public transport links to Dublin City, Dublin Airport and the Greater Dublin area; and
- > Promoting the development of high quality living and working environments.

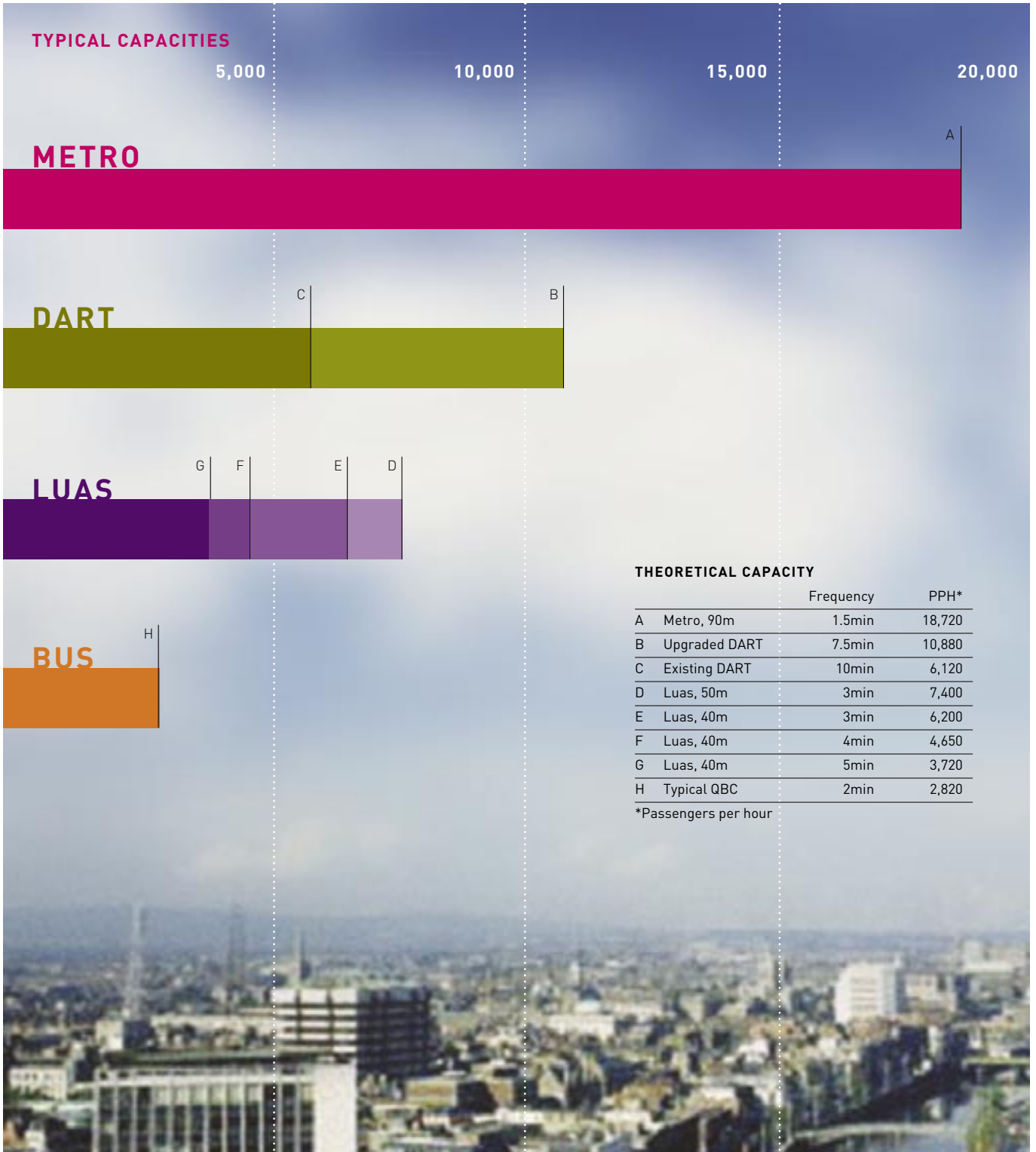
Swords, with a population of 100,000 people can be vital part of the future growth of the Greater Dublin Area. The measures to achieve this are in place if rapid transit delivery is progressed.

In addition, the shadow benefit that such coherent growth in Swords can deliver for the surrounding countryside, towns and villages should not be underestimated. Rush, Lusk and Donabate will all benefit from this sustainable approach to future development.



Through the provision of a strong transport link Swords has the facility to grow in a sustainable manner, while providing housing and mixed development opportunities with the right critical mass to support third level education, health and other amenities.





2

MetroNorth

Planning for rapid transit public transport solutions to Dublin airport

To date on two occasions – 1999 and 2004 – Fingal County Council has had to consider for itself the optimum realistic solutions for the delivery of rapid public transport for Dublin airport in its operational area.

On both occasions submissions were made and examined. In the 1999 Plan two rapid rail routes were reserved:

- > for a new south-north line from the city through Ballymun;
- > and an west-east reservation for heavy rail from the Maynooth line to the airport.

The published Draft Fingal County Development Plan for 2005 to 2011 has only a single route from the city through Ballymun. This strategy was recently endorsed by the new Council at the second stage of the Development Plan review.

Amongst the factors that contributed to a decision to favour Metro on a dedicated line was the carrying capacity of that transport mode that outperformed any rival. Other factors included:

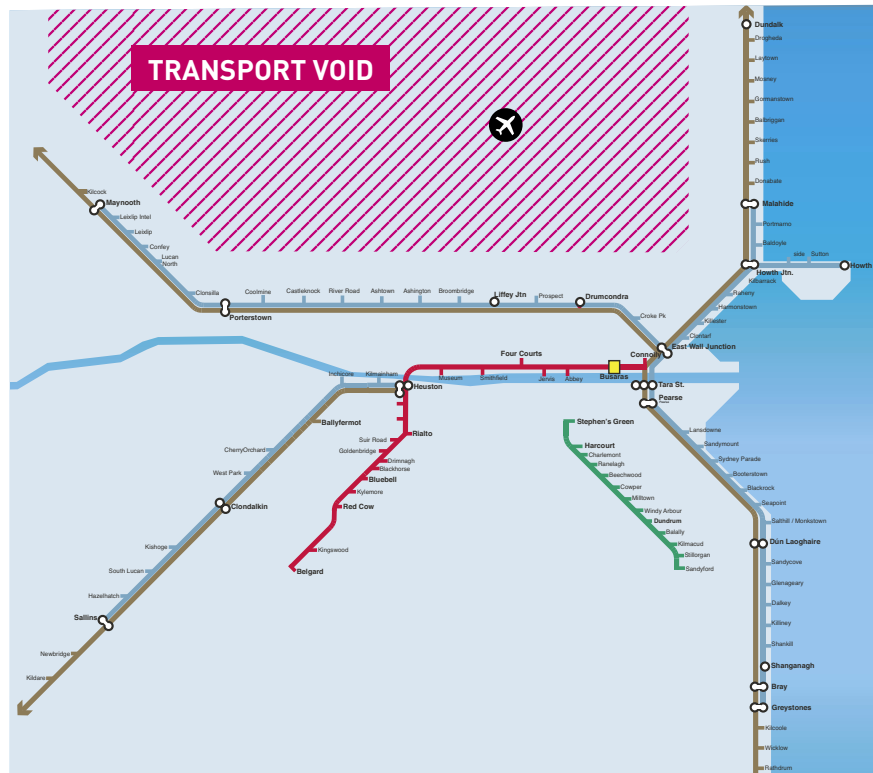
- > a prejudice against cross-country routes to the airport that might lead to development in the reserved green belt under the air approaches to the airport runway(s);
- > opposition to any measure that would remove train slots per hour from the already inadequate rail service on the northern commuter line as far as Drogheda; and
- > that any measure should benefit the greatest number of people possible along any route, especially if they had no access already to such facilities.

2.1 THE PROPOSED ROUTE

In a current rail map of the Dublin region there is an entire empty segment of the city region. Dublin airport sits in the centre of that rail transport void. Existing rail-based commuter services on the north side of the city are concentrated on the coastline – missing half the potential catchment area that a centred line could provide.

The proposed route addresses this transport void making a direct link between the city, Dublin Airport and Swords.

Dublin Airport sits in the middle of a north county Dublin rail transport void. Suggestions of a spur connection from the existing coastal line would do little solve this transport void. The opportunity to serve a significant segment of the population of Dublin with rapid rail would be missed.



2.2 CATCHMENT AREA

The catchment area for the MetroNorth will include many north Dublin towns and villages already served by the coastal commuter service. These towns include Skerries (10,940), Donabate/Portrane (6,141), Lusk (4,131) and Rush (6,759). In addition bus services serving towns in east Meath and south Louth, from where significant commuter numbers now originate will be able to terminate at Swords North (Lissenhall).

2.3 RELATIVE BENEFITS

The cost benefit analysis exercise carried out by the Rail Procurement Agency for the Metro to Airport route gave a factor of 1:1.36 return on investment for that route. The extension of the line to Swords for a net cost of circa €150m for 6.5km of overground line (the second €150m being raised locally through dedicated levy contributions) improves the cost benefit ratio for the entire line. This arises from the benefits associated with ease of congestion at the airport, the removal of commuter traffic from national primary routes together with major benefits in social and community terms.

MetroNorth can provide a rail service to 85,000 people within 10 minutes walk of its catchment area on its proposed route in the existing Dublin City areas. Through the linkages within the city transportation network more than 250,000 citizens will have access to MetroNorth. In Fingal it can provide services today for a further 25,000 living within the same 10 minutes walk. Should the route be approved to Swords that Fingal figure can rise to at least 60,000 through the provision of a new metro-oriented sustainable community along the northern edge of Swords in lands where the line is suitable to terminate.

In addition to the communities served, an optimum of 60% of airport users – the proportion who do not travel and park their cars, will use the service as set out in the RPA case already submitted. This includes the 4 million visitors annually for whom Dublin City is a destination of itself.

Metro in the preferred model here can remove 89 million vehicle kms per annum when working at optimum – a huge potential saving in traffic congestion.

2.4 THE BENEFITS

National

An additional runway together with associated terminal facilities will increase trip generation to significantly above current levels. MetroNorth will support the required expansion of the airport which will be the most significant source of increased travel demand in the Airport environs.

It is essential that future development at Dublin Airport is prioritised when considering transport infrastructure.

Regional

The introduction of MetroNorth has the potential to address housing needs by offering genuine choice, an opportunity to those who want to be part of this thriving city and region. This potential is available along all the route of MetroNorth.

The potential of brownfield city sites such as that at the Mater metro stop and the former printworks at Botanic Avenue add to the potential of the renewed Ballymun town.

For sites in the Fingal area, the County Development Plan sets aside the area between the airport and the M50 for a special Local Area Plan once a Metro route is determined.

In Swords there exists the opportunity to develop a location in the area that will provide real benefits for the region. Planning for this town, identified as a 'consolidation' town in the Regional Planning Guidelines, developed significantly when in the 1999 County Development Plan an outer boundary was set for its growth. The town has played a significant part in contributing to the housing demand. Thriving new suburbs and sub-centres have been created and there is a young population. Into the future however planning will be increasingly circumscribed by our inability to consolidate to the optimum extent to grow an efficient town, in land-use terms, due to lack of rapid public transport links to remove road-based travel as the sole option. This is even more the case for the surrounding smaller towns and villages.

Planning for MetroNorth provides a singular opportunity to grow a sustainable community. Such concentrated 'smart growth' in turn allows pressures on those surrounding communities to ease, enabling the north

MetroNorth route and new development areas

The potential of brownfield city sites such as that at the Mater metro stop, the former printworks at Botanic Avenue add to the potential of the renewed Ballymun town.

For the sites in Fingal area, the County Development Plan sets aside the area between the airport and the M50 for a special Local Area Plan once a Metro route is determined.



Dublin towns to retain their character rather than each being the mirror of its neighbour – continually growing out into the countryside.

Fingal County Council has made provision that the potential for this area to maximise the added value available from an international airport location in one of the world's most open economies will not be wasted by premature development.

Local

This document sets out a vision of the potential for Swords and the hinterland, already alluded to in the description of the context for this infrastructural investment.

The town will become an attractor for major investment in the residential, commercial and industrial sectors and the catchment area for retail and commercial services provided in the town will immediately and significantly increase. Opportunities exist to intensify undeveloped lands and brownfield areas in the vicinity of MetroNorth to maximise the benefits and efficiency of the metro. The town will also be better positioned to maximise the benefits of its location immediately adjacent to the airport.

It is important to state that in researching this report and proposal that many and repeated contacts were made with many stakeholders including business interests, land owners and other groups who were needed to be included at this initial stage. Again during the preparation for the review of the draft Development Plan 2005 – 2011 the Council was briefed on the proposal and the opportunities it afforded the town of Swords and the hinterland areas.

In all cases approval and support was given without hesitation. Each party, from their perspective could see the overall benefits that would flow and cooperation and support was offered in all cases.

Map showing the potential development or redevelopment sites in Swords that are proximate to the Metro route

- Undeveloped Unzoned lands in the Lissenhall area
- Zoned lands where permissions have been granted or development has occurred but that offer opportunities for redevelopment
- Zoned undeveloped lands for which permissions have yet to be completed



New standards for work / life balance can be introduced in areas in the vicinity of the MetroNorth. In these areas residents are not tied to car-based commuting and amenities are provided on their doorstep.



Full of life and opportunity



2.5 COSTS/FUNDING STRATEGY – AIRPORT TO SWORDS

The costs for the MetroNorth *City to Dublin Airport* section has already been submitted to Government by the Rail Procurement Agency. This section deals in particular with the Costs / Funding Strategy for the section from the Airport to Swords north.

COSTS	€ MILLIONS
Civil Engineering Works	110
Railway Infrastructure	74
Stations (5 no. at €2m)	10
Land	10
Enabling Works	11
Operational Systems	26
Contingency	24
Sub-Total	265
Planning and Design	25
Total	290

The Planning and Development Act 2000 allows for the adoption by the local authority of a supplementary development contribution scheme in respect of public infrastructure. Lands benefiting from the provision of the infrastructure are included in the scheme and planning permissions granted on those lands would attract the levy.

Experience elsewhere is that the prospect of delivery of quality public transport raises land values. This premium can be captured in the public interest and utilized in the funding arrangements for the system. A levy scheme has been put in place in Dun Laoghaire Rathdown in advance of approval of the line itself, in respect of the extension of Luas to Cherrywood (Line B1). The scheme has been in operation, since January 2003 raising levies on new developments with the funds being routed to the Rail Procurement Agency.

Specification of Area to which the Scheme Relates

The primary catchment for rail based quality public transport, as recognised by the Dublin Transportation Office and other authorities, extends to lands within 1 kilometre of the line. In effect therefore the corridor is a 2 kilometre wide band centred on the line. This equates to a 10-12 minute walking distance. This is considered to be a conservative view of the beneficial impact.

However, it is important for the business case that must be made for the scheme that it be grounded in acceptable parameters. In this regard whilst there is a ‘benefit’ from the Metro to a wide area, even beyond Fingal, the primary direct benefit is within the walking catchment where it delivers a perceived benefit to the individual greater than the perceived cost of taking the car.

Anticipated Yield from a Supplementary Development Contribution Scheme

Because of the high capacity of Metro, a large population and high density commercial uses are required within the primary catchment to take up the capacity of the system and contribute to its viability. The line of the Metro in Fingal runs through a number of distinct areas, each with a different potential to contribute to the intensity of activity in the catchment area.

Areas around Swords outlined for section 49 status.



The airport will be subject to major growth in accordance with a master plan for the Designated Airport Area. Because of serious road congestion, however, any significant expansion of the airport is contingent on the provision of the Metro. As in the case of the lands south of the airport, potential levies are likely to be attributed to the City to Airport section of the scheme.

Lands between the existing southern boundary of Swords and the airport lie partly within the red approach zone and the outer public safety zone. Development will be restricted in this area which should be retained as part of the green belt / green lung separating the airport from Swords.

An area of land lies between the development boundary of Swords and the outer public safety zone. A part of this, at Fosterstown and Nevinstown would be suitable for zoning for employment uses and for development as a southern 'gateway' for Swords.

Undeveloped zoned lands within Swords are indicated on the maps below. These lands are generally capable of development to high densities in accordance with the vision set out in this report.

Undeveloped zoned lands in Swords



There are also lands within Swords the present use of which are low intensity and unsustainable in the context of a Metro line. These have a potential for redevelopment over time. It is not possible, however, to predict the extent to which these lands will be subject to redevelopment proposals even though their redevelopment would undoubtedly make a significant contribution to the reorientation of Swords along the Metro.

Expansion of Swords to the south is constrained by the airport and to the east by the M1 and the green belt separating Swords and Malahide. To the west there are no constraints but the zoned area is already in excess of 2km from the Metro line. To the North there is a substantial area which lies within the 1km catchment of the Metro and between the development boundary of Swords and the M1. This area, in addition to its capacity to provide for park and ride, has a high potential to assist in building up the necessary critical mass for the effective operation of Metro and to provide the opportunity for a higher yield from a supplementary development contribution levy scheme.

Application of Supplementary Development Contribution Scheme

It is intended that a similar approach be adopted for the Metro scheme in Fingal as was adopted in Dun Laoghaire Rathdown for their Section 49 scheme. An amount would be levied per hectare thus encouraging the maximization of development density on the site. This would result in a reduced effect on individual house buyers in higher density schemes.

The rates of levy in Dun Laoghaire Rathdown were fixed at €250,000 per gross site hectare for residential and €570,000 per gross site area for commercial. By 2005, these figures, updated by a compound interest of 5% would be €275,625 for residential and €628,425 for commercial. These figures are used for the purposes of estimating the levy yield in Fingal.

It is important that the public / private contribution to the funding of the scheme be on an equal basis. Given the cost estimates provided in this report this would give rise to a requirement for €145m. The final figure will in addition need to include an additional amount to cover financing costs and risk. The working figure for 50% of cost is therefore taken as €150m.

Assuming that lands identified as zoned but without planning permission and land unzoned within the 1km band are most likely to be delivered within the timeframe, the updated levies stated could yield the following:

ZONED LANDS		YIELD €M
Commercial	77ha	48.3
Residential	20.9ha	5.7
UNZONED LANDS		
Commercial	123.5 ha	77.6
Residential	50.5ha	13.9
Total		145

The outcome would therefore be:

Yield from zoned and unzoned lands	145
Cost (at 50%)	150
Shortfall	5

This is an estimation of potential yield, assuming the development of 100% of the zoned and unzoned lands identified.

The redevelopment of lands which are already developed would potentially yield additional levy income. They are unlikely to come on stream to any great extent in the medium term, however, as much of the development is of comparatively recent construction. From the perspective of a business case there would not be confidence on the yield being achieved from these lands. If say, 10% comes on stream this will provide for the shortfall of €5m as set out above plus a possible shortfall from the forecasted yield.

3

Conclusion

Dublin airport and the city region cannot cope with projected levels of growth without the provision of a MetroNorth type service as proposed.

This will have major repercussions for our international competitiveness, national economic growth, regional development and city centre viability.

This is an opportunity to plan sustainably for the region in support of the protection of the airport – a vital asset of infrastructure.

It is also an opportunity for Swords and its hinterland to offer a new vision where work / life balance can be achieved for new communities supporting our continued economic growth.

MetroNorth addresses the transport void in the Dublin City Region and becomes the critical enabler of growth for the Dublin/Swords conurbation.

MetroNorth can provide optimum services for visitors and communities heretofore unserved by rapid public transport services. It is not an upgrade for services that already exist.

Rather than attempt to retrofit solutions in the future there is a window of opportunity to plan sustainable development for Dublin, the Airport and Swords..

Appendices

Appendix A

Demographics

A.1 THE FINGAL POPULATION

A.1.1 Existing Population in Fingal [source 2002 Census]

Population	196,413
Number of Households	60,999
Occupancy rate	3.23 persons per household

A.1.2 Medium Term population projections [2002- 2012] for Fingal

A variety of Medium Term population projections for Fingal have been prepared by differing authorities. These County projections result are broadly similar, and that summary is as follows:

Year	2002	2006	2011
Population Projection 1*	196,413	236,629	284,725
Occupancy (persons/house)	3.23	3	2.9

* This estimate, by Fingal County Council, assumes that not all of the zoned lands will be developed in certain areas within the County [including Balbriggan, Lusk, Rush, Donabate and Portmarnock South] by the year 2011 due to infrastructural constraints [e.g. water and drainage]. It is also assumed that areas closer to Dublin City are more likely to be developed.

Year	2002	2007	2012
Population Projection 2*	196,413	252,975	298,588
Occupancy (persons/house)	3.23	3	2.9

*This estimate was prepared by Mr. Joe Durkan, UCD, for 2002-2012. In his projections the County population is not broken down by areas within Fingal. An assumption is made that in-migration will be 45-50,000 by 2010.

Year	2002	2010
Population Projection 3*	196,413	259,757
Occupancy (persons/house)	3.23	2.75

*These Projections are prepared for the Regional Planning Guidelines. House occupancy rates are similar to the rates applied in the Fingal County Council projections.

Long-Term Population Projections – 20 to 25 years

Year	2002	2027
Population & Projected Population*	196,413	400,552
Households	59,229	151,078
Occupancy (persons/house)	3.2	2.6

**Assumptions are made with regard to decreasing in-migration levels over this period in this projection by Mr. Joe Durkan, UCD.*

Swords and its hinterland comprises: Swords, Skerries, Lusk, Rush, Donabate, Portrane, Malahide, Portmarnock and Loughshinney, but not Balbriggan.

**A.2 SWORDS AREA AND ITS HINTERLAND
FUTURE POPULATION FORECASTS**

Year	2002
Population	82,688
Households	25,569
Occupancy (person/house)	3.23

In the most recent county-wide housing count figures prepared by Fingal [June 2004] 40% of ‘occupied houses’, ‘houses under construction’ and ‘potential infill’ housing were located in ‘Swords area and its hinterland’.

The future population in ‘Swords and its Hinterland’ could grow from:

Year	2002	2027
Population	82,688	164,064 (81,376* increase)
Households	25,569	56,573 (31,004 increase)
Occupancy (person/house)	3.23	2.9

**This is 39 % of all Fingal population growth to 2027 as prepared by J. Durkan. He further states that it is not unreasonable to assume that, of the projected additional number of housing units [92,000], some 40,000 could be located within the ‘Swords area and its hinterland’ over the 2002-2027 period. It should also be noted that this scenario is exclusive of Metro.*

A.3 SWORDS

A.3.1 Current Figures

Year	2002
Population	34,576
Households	10,717
Occupancy (persons/house)	3.2

The existing population and population structure for Swords is predominantly youthful in structure - proportion of people over the age of 45 years of 16 %.

Age	Population	%
0 – 14	8,823	25.5
15 – 24	5,517	15.9
25 – 44	13,335	38.5
45 – 64	5,574	16.1
65+	1,327	0.3
Total	34,576	

A.3.2 Medium term population projections for Swords

Year	2002	2011
Population	34,576	53,133
Households	10,717	
Occupancy (persons/house)	3.2	

Assuming a continuance of current trends, the proportion of the population over 45 years of age may grow from 16% in 2002 to 26% in 2011, with 65% of the projected population under the age of 40. Significant development in the meantime however, will continue to keep a greater proportion of the population under 40 – a huge asset to any economic development potential.

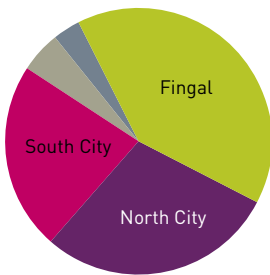
Appendix B

Economic Trends

B.1 LABOUR RESOURCES

Location of Employment of Fingal Labour force 2002

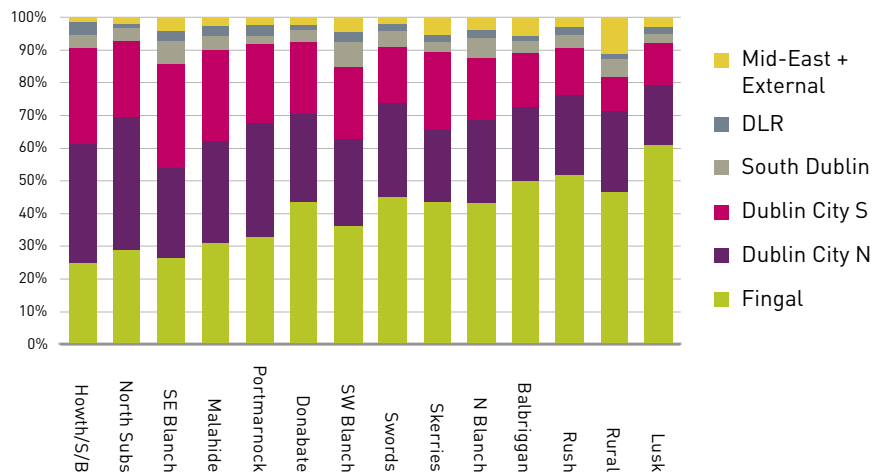
The breakdown of employment patterns for the Fingal County reveals the following:

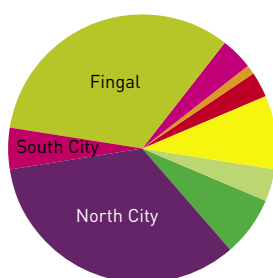


Within Fingal	39%
North city	28%
South city	22%
South Dublin County Council area	5%
Dun Laoghaire Rathdown County Council area	3%

Dublin City is the location of employment for approximately half of those living in Fingal, with north Dublin City accounting for 28% and south Dublin City accounting for 22%. Just over 40% of the Swords labour force works in Fingal with circa 27% working in either in the north or south City.

% Fingal Area Labour force by Location of Employment (sorted by Total City Employment)





The source of workers for Dublin Airport

The importance of Fingal as the source of all workers at Dublin airport is evident with 34% resident in Fingal. 67% of all workers at Dublin airport are resident either in Fingal or North Dublin City which is very significant as the route of the Metro travels through the north city to airport and on to Swords

Fingal	34%
North city	33%
South city	5%
South Dublin County Council area	7%
Dun Laoghaire Rathdown County Council area	4%
Meath	9%
Kildare	3%
Wicklow	1%
External	4%

Internal commuting within Fingal

30,000 Fingal workers travel to work in Fingal, the majority (17,500) travel to work in their home area.

The only significant level of commuting is from:

- Swords/Donabate to the Airport (1,684) and Malahide (712)
- Northern Railway towns to Swords (1,373) and the Airport (810).
- Malahide/Portmarnock to the Airport (705) and Swords (527).
- Blanchardstown to the Airport (549)

The flows back along the railway (Sutton/Howth/Malahide/Portmarnock – Lusk/Rush/Skerries/Balbriggan are insignificant (55) compared to the inward flow (563)

Appendix C

Dublin Airport

The status of Dublin Airport is that it is a key element of national infrastructure. Prudent planning must be exercised in relation to the protection of this asset, the continued optimum operation of the Airport being of vital national interest.

Decisions taken about the way the Airport develops will have far-reaching implications for the national economy. The Airport is also a major source of employment and a generator of employment growth potential in its own right.

For its part, both Dublin County Council and Fingal County have signalled its acceptance of the possibility of a second parallel runway (currently the subject of a Planning Application) on successive Development Plans since the first Plan of 1972.

C.1 FINGAL COUNTY COUNCIL AND THE AIRPORT REGION

The 1999-2004 County Development Plan generated the “South Fingal Planning Study”, described in Section 3.2 above, set a vision around three principal roles for the area, namely as:-

- > A **gateway** to Dublin, Fingal and Ireland:
- > A **hub** of the sub-regional economy; and
- > A **‘Green Lung’** for the whole of the northside

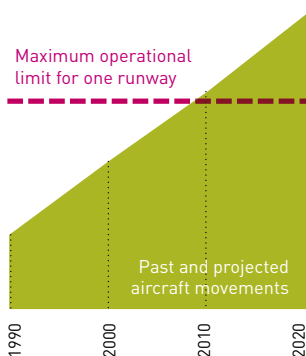
The Policy recommendations in respect of the Airport are summarised as follows:

- > **Airport Action Plan** to be agreed for land within a Designated Airport Area,
- > **A Designated Airport Area** to define future expansion to take place with priority for airport-related uses, covering the area between the two runways.
- > A **2-Runway 2-Terminal** configuration major expansion of the Airport from its current form of 1 Terminal + 1 main/1 minor (cross) runway.
- > **Forecast growth is a national priority**, and the scale is immense: in passenger traffic, from 14 million passengers/ year to over 20 million in 2011 and over 30 million in 2020; air freight, too, is growing at over 5% per annum.

- › The **second runway** must be part of the Action Plan and should encourage its development by the end of this decade.
- › **The use of the existing cross-runway** should be as limited as possible to minimise the extent of environmental intrusion to residents beneath the flight path.
- › The proposal for a **cargo centre** should be at a terminal between the two parallel runways;
- › **A second terminal** should disperse airport activity and traffic away from the increasingly busy and congested M1/N1 spine and its junction with the M50 at Turnapin.
- › **Parking supply** total, long and short term will need to be 30,000 spaces by 2011.
- › **The existing road capacity** is a major concern on the strategic roads within the study area. The M50 and the M1 spine are already under stress for significant lengths of the working day. The road system will need significant strengthening as well as the relief that will come from major new public transport capacity.
- › **A second airport western access road** may be required from around 2007 due to forecast congestion on the existing eastern access road network and in association with the development of a second parallel runway and the relocation of airport operations westward within the DAA. The design and programming of this needs to be harmonised with both the proposed upgrading of the N2 and the Action Plan to be prepared.
- › **The development of a Metro connecting Dublin City, the Airport and Swords** is essential to the efficient sustainable access in anything but the short term. The corridor which includes the preferred alignment for the Metro should be protected and not compromised. Without the Metro, the road system cannot cope with forecast airport growth and certainly not with additional commercial development.
- › **In the short term only**, continuing improvements to bus services and controlled expansion of parking provision will be essential to cope with continued growth at the airport. A clear and speedy Government decision to proceed with the Metro is vital to the effective functioning of the South Fingal area.

FUTURE AIRPORT GROWTH – THE ISSUES

The strategic matters that have potential to limit capacity of the Airport are as follows:

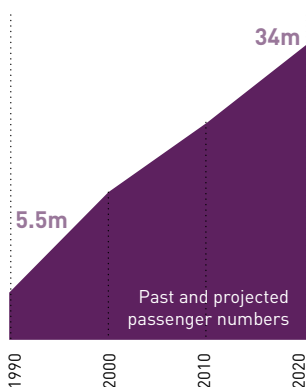


1. Runway capacity

The number of aircraft movements has grown from circa 83,000 in 1990 to 165,000 in 2004 to circa 330,000 movements in 2020. Maximum safe operational limit of 44 aircraft movements per hour per runway at Dublin means that, at the current rate of growth, the airport will have reached capacity of operation with one runway before 2010.

2. Passenger growth and Air Freight

The current operation level of the airport mean that, without dedicated cargo areas separate from passenger terminals, cargo operations are catered for during night-time off-peak periods. Similarly the configuration of the current stands is not best arranged to cater for the necessary variety of aircraft body types to allow those stands to operate at optimum capacity. This arrangement for cargo is operated in a vacuum of policy about the optimum operation of Air Freight for the national economy.



3. Passenger Handling

Passenger numbers have grown from approximately 5.5 million in 1990 to just under 16 million in 2003. The number of passengers at Dublin airport is expected to grow from circa 17.4 million in 2004 to 34 million in 2020. It is inevitable that the configuration of passenger handling must change from the current configuration – whereby virtually all passengers are funnelled through a single entrance – must change. This issue is secondary only however, to the more serious medium to long-term matter of Airport Access for those increasing passenger numbers.

Source of information on future airport growth: Dublin Airport Authority



4. Access by Road - projected growth

To minimise capacity problems in the interim, it is essential that development of zoned areas progresses in parallel with improvements to infrastructure rather than in advance.

5. Car parking at Dublin airport

<i>Existing Car Parking Spaces</i>		<i>Totals</i>
Spaces with permanent planning permission	11,000	
Spaces with permission expiring in May '05	14,600	25,610
Short term Public Car Parking Spaces	3,800	
Long Term Public Car Parking Spaces	14,600	18,400
Staff Spaces	5,360	
Car hire	910	
Taxis	140	
Executive	120	
Overall Total		25,610

Parking supply total by 2011 long and short term will need to be 30,000 spaces

6. Employees

In 2001 the number of employees on site at the Airport was estimated to be circa 13,000 in over 100 companies. The number of jobs is forecast to rise in line with airport throughput at the rate of 1000 jobs per million passengers. On this basis, total employment is expected to exceed 30,000 persons by 2020.

AIRPORT ACCESS

Continuance of Airport Access is of central importance in planning for this vital national asset. The Airport Authority must assume less reliance on the private car as a primary means of access to the Airport. The proportion using cars is expected to fall from 54% in 2004 to 45% in 2010. Notwithstanding this decreasing share - the actual number of car trips increases by 1 million over this period. Even with a significant increase in use of public transport, car trips to the airport are forecast to increase. This has direct implications for congestion on roads and car parking demands at the airport.

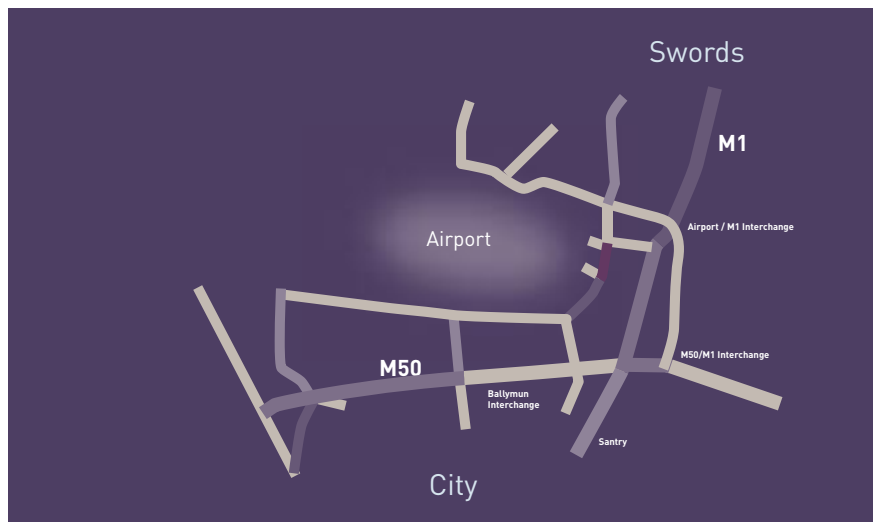
Road Stress Levels 2004

Analysis shows that the new M1, just opened is already under stress from traffic as it approaches the airport turnoff to the north.



Road Stress Levels 2010 Without the Metro

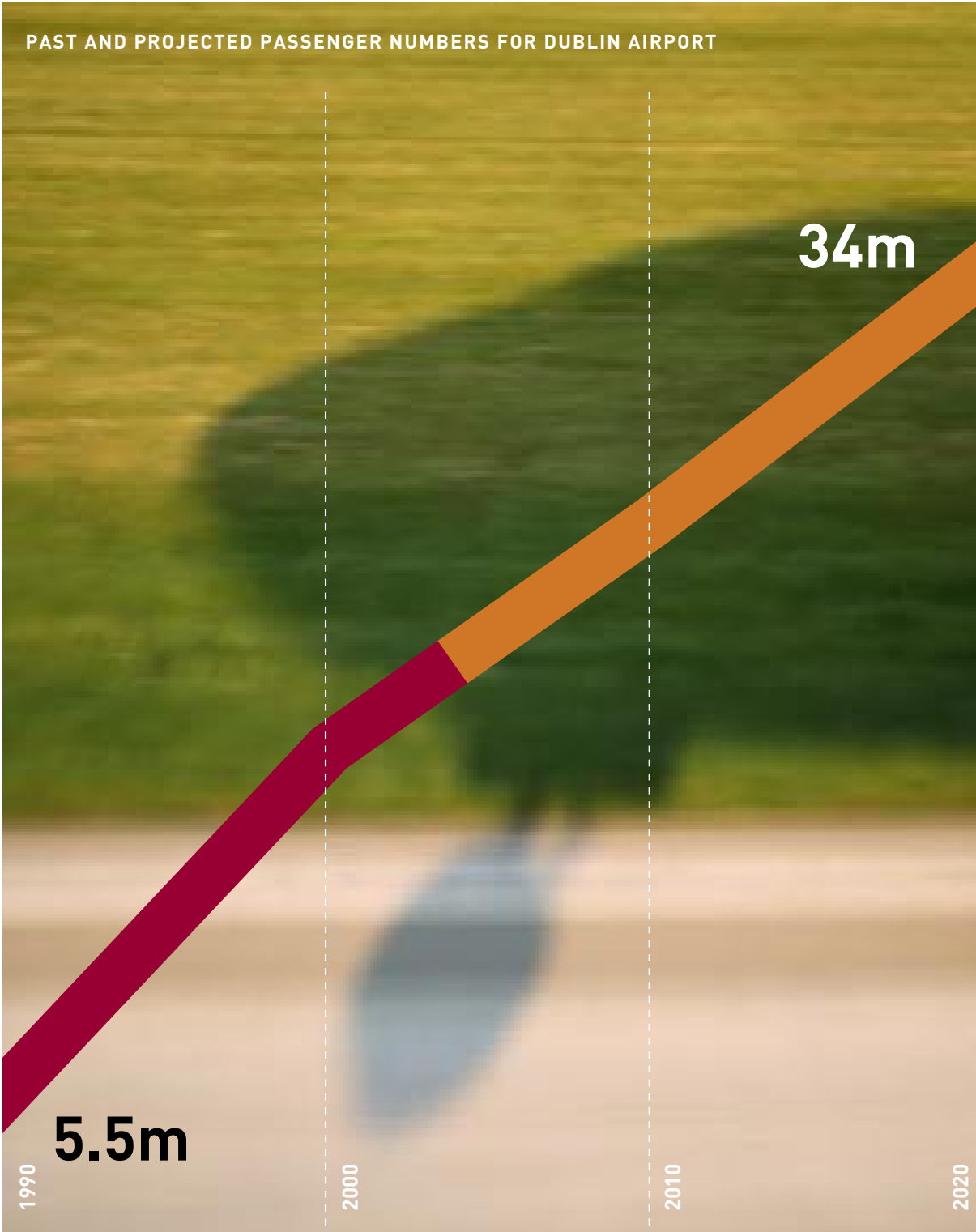
Projections for 2010 show that many of the vital airport access roads will not withstand any exceptional event, as it would compromise access and exit from there.



If new public transport provision does not deliver the projected modal shift or a Metro link is not operational until later than assumed in the Dublin Airport Authority modelling [2008], which is very likely, the increase in the number of car trips will be greater. The modal split figures show how reliant the airport will need to be on public transport. Public transport improvements are at the core of the strategy for access to the airport, and for a workable transport system all round the airport area which includes two of the state's most crucial links, the M11 corridor and the M50 C Ring.

Realities without a Metro link

- > The M11 and M50 will simply grind to a halt resulting from unconstrained [except by congestion] growth of car movements to and from the airport as well as those travelling along the national road network.
- > Increasing demands for car parking at the airport will require consequent need to provide larger areas of car parking.
- > Serious limits must be placed on new development, including especially housing, in the entire east Fingal area.



Appendix D

Swords

Developing Swords for the Metro

TRAFFIC MOVEMENT STRATEGY WITH METRO IN PLACE

Swords can be a transport hub with an integrated public transport system.

Large increases in the population to the region of 100,000 and over are possible. The existing and planned road network will be placed under severe pressure by this level of growth, even at the lower range.

A very significant shift to public transport will be required to match such major population growth.

A wide range of new roads will be required to support the growth of Swords. These will allow bus services to develop for local transport needs and for connections to the proposed Metro at interchange stations.

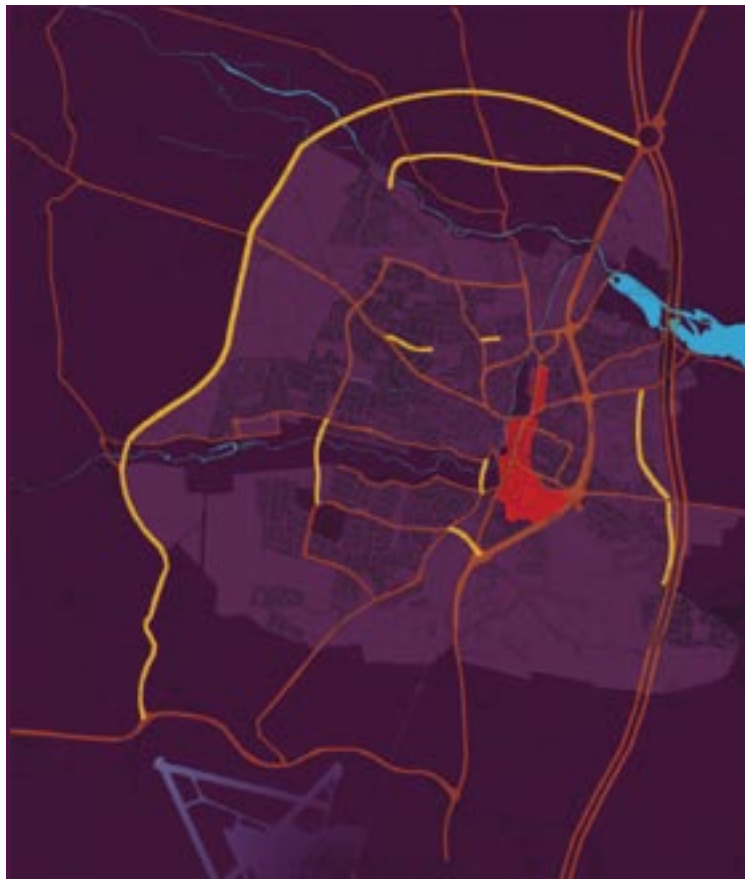
Local and regional traffic should be directed away from the centre of the town where the existing radial road system converges. A key aim should be to encourage orbital routes with a choice of cross connections on suitably segregated roads that do not adversely affect residential amenity.

Distribution of future traffic to an expanded road network will indicate what changes may be considered for the existing roads such as the R132 Swords Bypass in the context of projected traffic volumes and other functions for buses and cyclists.

Potential cross-town bus routes using new road links.



The extent of new road connections (indicated in yellow) is small for a huge return in inter-connectivity for the town of Swords



D

THE NEW URBAN STRUCTURE

In a developing, strengthened role, Swords will be a place with a well-defined and consolidated historic core balanced with a new model of sustainable living / working community in the newer areas along the Metro route and surrounding the Metro as it travels to the north.

Swords will develop to be:

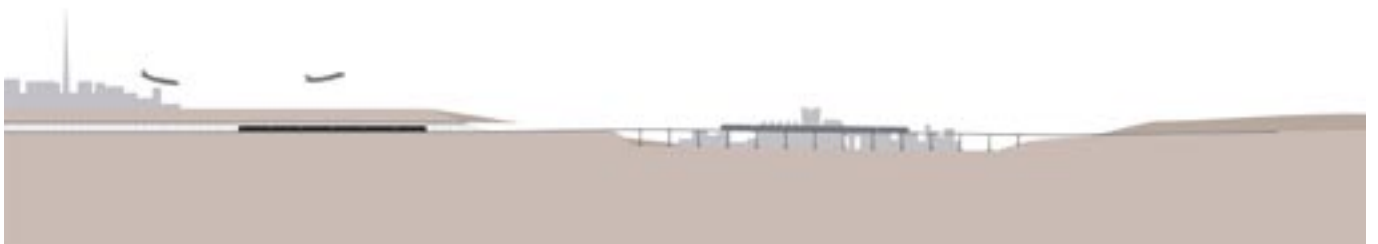
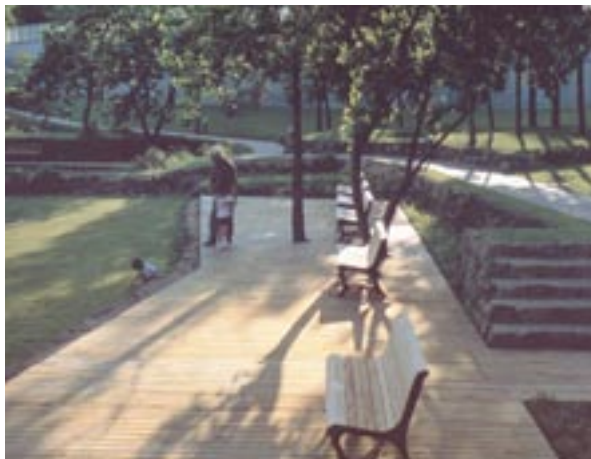
- › A place with a thoroughly integrated network of routes for pedestrians and cyclists and integrated public open spaces, linking, not dividing, its neighbourhoods with one another, and especially with the town core and the employment areas.
- › A location for major social/ cultural infrastructure facilities including a hospital, theatres and cinemas, sporting facilities and a third level college.
- › Highly accessible for a wide labour force.
- › A major attractor for investment in residential, retail, office and industrial uses.
- › Set in its surrounding countryside with well defined town boundaries separating it through the mechanism of designated green belt areas.



The new Swords town map showing a thoroughly integrated town.

A NEW URBAN FABRIC

A design strategy for integrating Metro:



For Housing

- › Plan for the sustainable development of new residential districts on the north and west side of the town;
- › Promote a hierarchy of spaces, scales that give a legibility of, within and between each of the distinctive residential districts/places and promote the development of improved local and service facilities in existing and planned neighbourhood centres;
- › Provide for a wide range of housing types to facilitate a diverse community;
- › Provide a model for the development of some residential use in mixed development areas on the east side of the R132 and in or close to the expanding town centre.

For the Historic Core

- › Clearly define that area as a resource for the town in a way that does not threaten its identity;
- › Promote the identity of a 'Civic' area in vicinity of the Castle and County Hall.

For Commercial identity and sustainability

- › Develop a strategy to give identity and containment to new places. To establish connections between these and the Historic Core, while ensuring that those areas can expand and develop to accommodate the future demands of a place with a population of upwards of 100,000.
- › To use this opportunity to remove and minimise to the greatest extent possible the real and psychological severance arising from the old N1 bypass.

For Connectivity

- › Develop a network of public open spaces that link the 'places' within the town and cease to act as a barrier.
- › Link residential areas to one another, to the town core, Metro stations and employment areas using bus, cycle and pedestrian routes
- › Develop bus, pedestrian and cycle routes Mitigate the physical and psychological 'severance' arising from the existing bypass by reducing the 'Barrier' effect of the R132

For the Economy of Swords

- › Due to its very favourable population profile Swords is poised to take full advantage of an increased level of economic growth. Factors that will improve on this capacity include:
 - The accessibility of the town to a wider catchment area in the GDA.
 - The strengthened relationship of the town to an expanding Dublin Airport.
 - Future development within the South Fingal Area.
 - Future changing employment structure
 - The critical mass arising from higher population that will sustain facilities such as:
 - Hospitals,
 - Third level institutions
 - Major employers that desire to locate to a strategically important location adjoining the motorway network, airport and Metro.

For Strengthened Local facilities

- › Develop local shopping and service facilities in the existing neighbourhood centres which are under utilised and encourage the provision of a residential component within these centres.
- › In the proposed residential zoned areas on the western edge of the town, as part of the LAP process provision should be made for a mixed use area to allow for the development of a local service centre incorporating some employment uses.

For Recreation and Amenity

- › Maximise the recreational potential, permeability and accessibility of the Ward and Broadmeadow river Valley parks and Malahide estuary
- › Improve linkages between the three water bodies and in particular between the Broadmeadow river and the estuary at Lissenhall.

Sustainable communities involve the integration of different uses, such as business and residential, and the promotion interaction between community members.



D

Appendix E

Costs/Funding Strategy

Consultant's Report

Capturing the Enhanced Value of Property on the Route

BENEFITS OF METRONORTH

The provision of quality rail based public transport to Swords will benefit the area as outlined above.

- > Facilitating the achievement of the objectives of the Development Plan in respect of sustainable development along public transport routes
- > Enabling significant time saving for commuters
- > Reducing overall travel costs
- > Improving the environment by reducing pollution due to emissions
- > Allowing the development of Swords, the County Town, to its optimum size
- > Encouraging economic growth with higher densities providing an increased local labour pool
- > Influencing the location decisions of employment providers by the provision of improved transportation

The prospect of quality rail based public transport such as the Metro will enhance the value of land and existing properties along the route. It is clearly desirable that some of this enhancement be captured in the public interest and utilized in the funding arrangements for the system. This has been achieved in Dun Laoghaire Rathdown in respect of the proposed extension of the Luas system from Sandyford to Cherrywood. A supplementary development contribution scheme has been in operation in the area since January 2003 raising levies on developments on foot of new planning permissions granted with the funds being routed to the Railway Procurement Agency to part fund the scheme.

SUPPLEMENTARY DEVELOPMENT CONTRIBUTION SCHEME

The enabling legislation for the development levy is the Planning and Development Act 2000. Section 49 of the Act allows a planning authority when granting a planning permission, to impose a condition requiring the payment of a contribution in respect of 'any public infrastructure service or project' which meets with certain requirements.

These requirements are that the public infrastructure service or project

- › is specified in a supplementary development contribution scheme made by the planning authority
- › is provided or carried out by the planning authority or by agreement with any other person and
- › will benefit the development to which the permission relates when carried out

The amount and manner of payment of the contribution is determined in the supplementary development contribution scheme. The provisions of the Act also require that the both the area to which the scheme relates and the public infrastructure service or project is specified.

The Act allows for a supplementary development contribution scheme to make provision for the payment of different contributions in respect of different classes or descriptions of development. This allows, for example for a particular land use, say residential to be levied at a particular rate and for another, say commercial, to be levied at a different rate

There is no provision in the legislation for the levying of the same land use at differing rates. This would appear to rule out the idea of a variable scale of levy depending on the distance from the Metro.

The making of a supplementary development contribution scheme is a reserved function. There is no appeal against the imposition of the levy in a planning permission except in certain limited circumstances.

A public infrastructure service or project is defined to include the 'provision of particular rail, light rail or other public transport infrastructure, including car parks and other ancillary development'.

Other types of ‘public infrastructure and facilities’ such as

The provision of bus corridors and lanes, bus interchange facilities including car parks for those facilities), infrastructure to facilitate public transport, cycle and pedestrian facilities and traffic calming measures (Section 48.17 (d) Planning and Development Act 2000)

can also be the subject of a levy scheme under Section 48 of the Act. The introduction of such a scheme would increase the accessibility of a wider area to the Metro line.

SPECIFICATION OF AREA TO WHICH THE SCHEME RELATES

The primary catchment for rail based quality public transport, as recognised by the Dublin Transportation Office, extends to lands within 1 kilometre of the line. In effect therefore the corridor is a 2 kilometre wide band centred on the line. This equates to a 10-12 minute walking distance.

This definition is further endorsed in the Residential Density Guidelines for Planning Authorities issued by the Department of the Environment and Local Government. The Guidelines define a Quality Public Transport Corridor as

‘A route with dedicated, high frequency and reliable public transport services which are accessible, user-friendly and integrate with other parts of the public transport network The primary catchment for quality public transport corridors extends to:

Rail – lands within 1km distance of a station

LRT – lands within 1km distance along the route

Bus – lands within 500 m along the route’

The Guidelines recommend that in locations proximate to existing or proposed public transport corridors, densities in excess of 50 dwellings per hectare (20 dwellings per acre) should be permitted, subject to appropriate qualitative safeguards.

It is considered that the 1km walking zone is smaller than would be the case for rail based transport in reality. Nevertheless this distance is widely accepted as the walking catchment of a rail based public transport route. In particular Dun Laoghaire Rathdown County Council has accepted it, in making the Section 49 scheme in that County. It has also been accepted by the Railway Procurement Agency, the Department of Transport and the Department of the Environment, Heritage and Local Government, being the Government Agencies with responsibility in the area.

It is important for the business case that must be made for the scheme by the RPA to the Department of Transport, and to avoid the danger of successful challenges to the levy scheme, that it be grounded in acceptable parameters. In this regard whilst there is a 'benefit' from the metro to a wide area, even beyond Fingal, the primary direct benefit is within the walking catchment where it delivers a perceived benefit to the individual greater than the perceived cost of taking the car.

ANTICIPATED YIELD FROM A SUPPLEMENTARY DEVELOPMENT CONTRIBUTION SCHEME

A Luas system has a capacity band of up to 7,400 people per hour in each direction. A Metro can accommodate 18,720 people per hour. A large population and high intensity commercial uses are therefore required within the primary catchment to take up the high capacity of the system and contribute to its viability.

Insofar as the generation of special development contribution levies is concerned, the line of the Metro through Fingal County runs through the following distinct types of area

1. The undeveloped lands south of the Airport
2. The airport and associated undeveloped lands
3. Undeveloped lands within Swords
4. Lands with a high potential for redevelopment within Swords
5. The undeveloped lands north of Swords

The undeveloped lands south of the Airport

These lands have been the subject of a recent detailed study published in September 2004 as South Fingal Planning Study by Llewelyn Davies and others. The study concludes that a substantial area of land between the southern runway and the M50 has potential for development primarily as a high density Metro-focused employment node. None of the land should be released, however until the Metro is confirmed.

There will therefore be the opportunity in the future, given that MetroNorth proceeds, to generate levies in this area. It is unlikely, however, that the provision of the City to Airport section of the Metro will be built without a section 49 supplementary development contribution scheme to assist in its funding. The yield from these lands would not therefore be available for the Airport to Swords section.

The airport and associated undeveloped lands

Dublin Airport is expected to grow over the next 20 years to accommodate a doubling of existing passenger numbers from 17 million passengers (2004) to over 30 million in year 2020. Such development will include a second terminal, additional cargo and commercial facilities and possibly multi-storey car parking.

Ultimately the future development potential of Dublin airport will depend on the production of an agreed master plan for the Designated Airport Area. It is clear, however that given the serious restrictions on road capacity in the vicinity of the airport, any significant expansion and development of the airport is contingent on the provision of the Metro.

As in the case of the lands south of the airport, all potential levies within 1km of the airport station are likely to be attributed to the City to Airport section of the scheme and so will not be available to fund the Swords link.

There is a substantial area of land, however, between the existing southern development boundary of Swords and the 1km airport catchment for the Metro. This lies partly within the airport red approach area and so would not be available for development. Another section of land lies between the red approach zone and the outer public safety zone. Whilst some development can be allowed in this area it is considered that it would not make a worthwhile contribution to the integrated development of Swords and that the area should be retained as part of the green belt / green lung separating the airport from Swords.

Finally there is a section of land at present zoned green belt lying between the development boundary of Swords and the outer public safety zone. A part of this, amounting to 26.2 hectares at Fosterstown and Nevinstown would be suitable for zoning for employment uses and for development as a southern 'gateway' for Swords without unduly compromising the green belt between Swords and the airport.

Undeveloped zoned lands within Swords

The total amount of commercial lands identified within Swords within the 1km catchment which are zoned but without planning permission amounts to 77ha. The corresponding figure for residential is 20.9 ha.

Lands with a high potential for redevelopment within Swords

It is important that the use of land within the 1km corridor of the Metro line is optimised in order to make a contribution to the national sustainable development objective of minimising the need to travel by private car. To that end areas have been identified the present use of which are low intensity and unsustainable in the context of a Metro line. It is likely that over time, some of these lands will be redeveloped at higher densities, encouraged by new development plan policies. It is not possible to predict with any level of accuracy, however, the extent to which these lands will be subject to proposals for redevelopment. It may be that from the perspective of a business case for the funding of the scheme the majority of these lands should not be relied on but considered as a bonus in terms of levy yield.

The selection of lands under this category is policy driven and to an extent subjective. The total commercial lands identified with a high potential for redevelopment is 169 ha. The corresponding residential figure is 2ha.

Undeveloped lands north of Swords

Apart from an area between the M1 motorway and the R132, all of the lands north of the Broadmeadow River are, at present zoned green belt. It is desirable as a general principle that the capacity of lands within the catchment of the Metro is maximised.

Expansion of Swords to the south is constrained by the airport and to the east by the M 50 and the green belt separating Swords and Malahide. To the west there are no constraints but the zoned area is already in excess of 2km from the Metro line. To expand further in a westward direction would be unsustainable in terms of the use of the Metro. To the North there is a substantial area (129 hectares) which lies within the 1km catchment of the Metro and between the development boundary of Swords and the M1. This area, if included in development zoning has a high potential to assist in building up the necessary critical mass for the effective operation of Metro and to provide the opportunity for a higher yield from a supplementary development contribution levy scheme.

Application of Supplementary Development Contribution Scheme

There are basically two approaches to the application of a levy scheme. It can be based on an area with an amount being levied per hectare or it can be based on the quantum of development with an amount levied per square metre or per residential unit. The argument for the latter is that it can be seen to be equitable in that lands with a greater development density, and therefore higher value, are levied at a higher total amount than the lands that are at lower density and values. This could also, however have the unintended effect that developers could chose not to maximize densities in order to pay a lesser levy.

In the case of the former (levy per hectare) the levy structure encourages the maximization of development density on the site in that the levy becomes less onerous per unit the more units are developed. This would result in a reduced effect on individual house buyers in higher density schemes.

In Dun Laoghaire Rathdown the levy per hectare option was incorporated into the Section 49 scheme. It is recommended that a similar approach be adopted for the MetroNorth scheme in Fingal.

Rates of Levy for Different Classes or Descriptions of Development

It is possible under the Act to apply different rates of levy to different classes or descriptions of development. The approach adopted in Dun Laoghaire Rathdown was to opt for two types of land use – commercial and residential. An economic appraisal of the impact of the levy was carried out and ultimately a differential in the levy of the order of 1:2.28 as between residential and commercial was adopted.

The rates of levy were fixed initially at €250,000 per gross site hectare for residential and €570,000 per gross site area for commercial. By the second anniversary of the adoption of the scheme, in January 2005, these figures, updated each year by a fixed compound interest of 5% would, in accordance with the provisions of the levy scheme, be €275,625 per gross site hectare for residential and €628,425 per gross site hectare for commercial.

Achieving an Equitable Public/Private Funding Mechanism

Experience with public/private initiatives in respect of rail based public transport is limited to the Dun Laoghaire Rathdown to date. In that case it was a non-negotiable position of the public authorities that the balance had to be 50:50. In the event the projected levies did not meet the 50% required and the balance was made up by way of a cash contribution.

Given the cost estimates provided in this report this would give rise to a requirement for €145m. The final figure will in addition need to include an additional amount to cover financing costs and risk. The risk element would include planning, design, contractor, construction and financial. The working figure for 50% of cost is therefore taken as €150m.

The timeframe for the levy scheme is likely to be 25 years, as is the case in Dun Laoghaire. Assuming that the lands identified as being zoned but as yet without planning permission are most likely to be developed within the timeframe and that the unzoned lands within the 1km band will also come on stream, and applying the updated levies above would yield the following

ZONED LANDS		YIELD (M)
Commercial	77ha	€48.3
Residential	20.9ha	€5.7
UNZONED LANDS		
Commercial	123.5 ha	€77.6
Residential	50.5ha	€13.9
Total		€145

The outcome would therefore be:

Yield from zoned and unzoned lands	€145
Cost (at 50%)	€150
Shortfall	€5

A more detailed examination may result in zoning changes being recommended for reasons of urban design. The above, in the interim gives an estimation of potential yield, assuming the development of 100% of the zoned and unzoned lands identified.

The redevelopment of lands which are already developed would potentially yield €105m, if all of the lands identified were developed. They are unlikely to come on stream to any great extent in the medium term, however, as much of the development is of comparatively recent construction. From the perspective of a business case there would not be confidence on the yield being achieved from these lands. If say, 10% comes on stream this will provide for the shortfall of €5m as set out above plus a possible shortfall from the forecasted yield.

This document has been created by Fingal County Council in association with Dublin City Council, Dublin Airport Authority and the Railway Procurement Authority and is for discussion purposes.
February 2005



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Dublin City Council / Dublin Airport Authority / Railway Procurement Agency
February 2005