



**Dunboyne/Clonee/Pace Corridor
Integrated Framework Plan for Land Use and Transportation**

Issues Paper
Meath County Council
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Dunboyne Integrated Framework Plan for Land Use and Transportation

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1 Introduction

1.1

Background

Meath County Council have commissioned Faber Maunsell in association with Tíros Resources Ltd. to undertake an Integrated Framework Plan for Land Use and Transportation (IFPLUT) for the Dunboyne/Clonee/Pace Corridor.

The Dunboyne / Clonee / Pace Corridor is designated as part of a Primary Dynamic Cluster together with Ashbourne and Dunshaughlin in the Regional Planning Guidelines for the Greater Dublin Area. As outlined in the DTO advice note the Integrated Framework Plan will provide detailed land use and transportation proposals for the long term growth of the development centres, which support and complement the wider DTO Strategy.



Figure 1.1 – Study Area in context of Greater Dublin Area

Meath County Council Development Plan Strategic Settlement SO 2 states an objective to “commence the preparation of an Integrated Framework Plan for Land Use and Transportation (IFPLUT) for the area of the Clonsilla to Pace Interchange corridor in Co. Meath including Clonee”.

The IFPLUT process is not a review of the development plan, but is a study to feed into the review of the development plan. It takes the development plan as the starting point, and makes suggestions for alternative land use patterns to complement local public transport, walking and cycling. The IFPLUT study will play an important role in ensuring the sustainable growth of the Dunboyne/Clonee/Pace Corridor into the future within the context of local, regional and national policy frameworks.

Dunboyne & Clonee have historically been under significant development pressure, primarily of a residential nature, due to their geographical proximity to Dublin. It is anticipated that the development pressure which has been experienced in the area will intensify within the Dunboyne / Clonee / Pace Corridor following the development of the Clonsilla – Hansfield - Dunboyne – Pace Interchange Rail Line, the M3 Motorway inclusive of the bypassing of Dunboyne, and the provision of the Pace Interchange which will link the Motorway / Dunboyne bypass with the rail line, all by 2010.

The main aim of the IFPLUT Study is to carry out a review of the current situation with regard to planning, development and transportation, and to recommend interventions where necessary. This Issues Paper provides a detailed review of the current transport and land use issues within the Study Area.

1.2

Overview of Study Area

The Study Area as specified in the IFPLUT Tender Document issued by Meath County Council includes the following;

‘the existing Dunboyne and Clonee Development Centres as determined by their Written Statement & Detailed Objectives contained in Volume II of the County Development Plan, all the lands in Co. Meath identified in the Clonsilla / Pace Rail Corridor Section 49 Supplementary

Development Contribution Scheme and the M3 Motorway Corridor from the Fairyhouse Cross to the Fingal border'.

Figure 1.2 overleaf presents an overview of the Study Area.

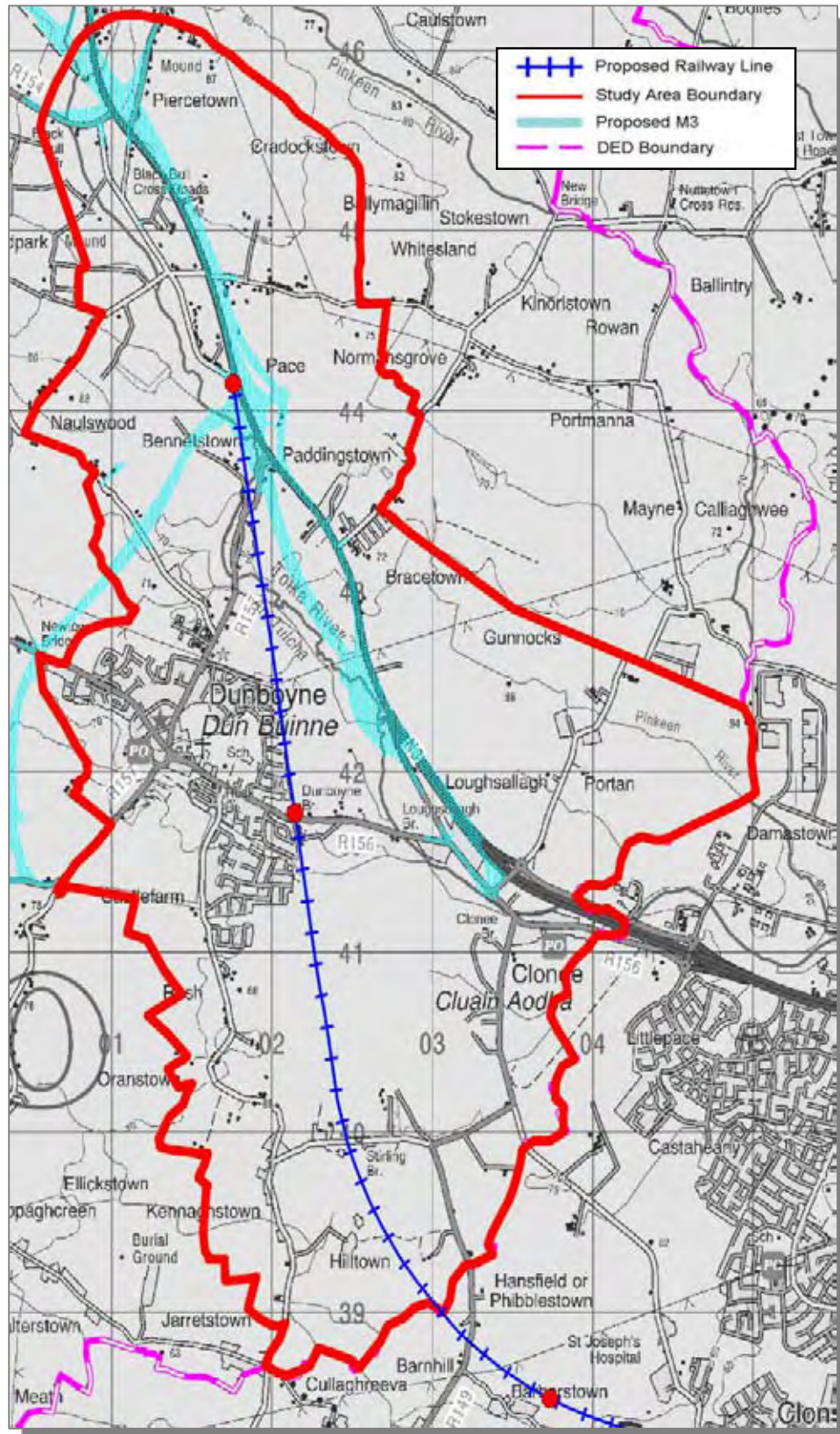


Figure 1.2 – Dunboyne IFPLUT Study Area

1.3**Purpose of this Report**

This document summarises the findings of the first stage of the study, which comprises primarily the data collection stage. This stage is crucial in determining the nature and extent of the transportation and land use issues relevant to the study area. The methodology used in deriving the issues paper is as follows;

- Examination of the existing conditions, namely traffic and transportation conditions in the Study Area through data collection and site visits;
- Public Consultation;
- Review of relevant strategic and local planning policy as contained in the following key documents;
- Identification of traffic, public transport and land use issues in the Study area;
- Identification of means for addressing these issues.

The output from this stage of the study is a clear summary of the issues to be addressed by the study proposals to facilitate the overall study objectives.

1.4**Report Structure**

The Issues Paper is structured as follows:

Chapter 2 - Data Analysis

A data collection exercise was undertaken to develop a better understanding of the study area.

Chapter 3 - Preliminary Consultation

Extensive preliminary consultation which included both stakeholder and public consultation formed an important part of developing and delivering constructive interventions in support of the study objectives.

Initial stakeholder consultation was carried out by means of issuing letters and face-to-face meetings with public consultation taking place at a public venue over a two-day period in early April.

Chapter 4 - Policy Review

This chapter presents a review of policy with regard to land use, road infrastructure and public transport.

Chapter 5 - Land Use Issues

This chapter presents a review of land use policy and a discussion in relation to land use conditions throughout the study area.

Chapter 6 - Transportation Issues

This chapter includes a description of the existing traffic and transportation conditions throughout the study area.

Chapter 7 - Conclusions

Chapter 7 presents the key conclusions of this Issues Paper and outlines the next steps that are required to ensure that the final strategy can be fully and successfully implemented over the study horizon.

Chapter 8 - Next Steps

This section outlines the next steps in the IFPLUT process.

2 Data Analysis

2.1

Introduction

A number of different data sources were used in the preparation of this paper. The primary sources of statistical data were the CSO Small Area Population Statistics (SAPS) and Place of Work Census of Anonymised Records (POWCAR). These data sets are derived directly from the Census records and supply a wide range of statistics related to travel patterns and socio-economic characteristics.

- DTO Household Surveys;
- DTO Travel to Education Surveys;
- Census 2006;

There are a number of information gaps. The CSO POWCAR data contains sufficient information on trips to work, and the DTO Education Survey on trips to school, but there is no comprehensive source of data on trips to shopping, public amenities, stadiums, concert venues etc. There is also a shortfall in transport supply data. Although data is available from service providers, the format and definition of the data makes it difficult to analyse, especially from a spatial perspective. As the process continues, it is the intention of the study team, where possible, to address these deficiencies in the data.

In addition to this desktop study a number of site visits were undertaken. In order to understand current traffic patterns traffic surveys were commissioned as outlined below.

2.2

Traffic Data Collection

A detailed programme of data collection was necessary in order to ensure that a full understanding of the current traffic situation could be established. Therefore a large scale series of traffic surveys were undertaken by a traffic survey specialist at key locations throughout the study area. These provide the necessary information required to produce a detailed traffic model of the town and will form a base of traffic information which can be used by Meath County Council in the future. These surveys include the following:

- Manual Classified Traffic Counts at 12 junctions and roundabouts, recording detailed hourly traffic movements over 7:00-10:00 (AM Peak) and 16:00-19:00 (PM Peak) hour periods;
- Automatic Traffic Counts (ATC) at 8 locations on national primary, secondary and regional roads, recording daily two-way traffic for a two week period;
- Registration Plate Surveys at 4 locations on regional roads; and
- A video recorded drive-through of all roads within the Study Area was carried out to collect additional information on road quality, safety and visibility issues.



Figure 2.1 – Location of Surveys

Table 2.1 illustrates the type and location of surveys that have been made available for the Study Area.

Table 2.1 - Detail of Traffic Surveys undertaken for the Dunboyne Study Area			
Junction Location	Junction Type	Type of Survey	Date
R157 Navan Road/Kennedy Road	3-arm Junction	Manual Count	17/04/08
R157 Navan Road/The Paddocks/ Temple Manor	4-arm Junction	Manual Count	17/04/08
P156 Summerhill Road/ R157 Maynooth Road/ Navan Road	4-arm Junction	Manual Count	17/04/08
Station Road/ Rooske Road	3-arm Junction	Manual Count	17/04/08
R158 Dublin Road/ Elton Grove	3-arm Junction	Manual Count	17/04/08
R158 Dublin Road/ Navan Road	Roundabout	Manual Count	17/04/08
R156 Navan Road/ Portan Road	Roundabout	Manual Count	17/04/08
Portan Road/ Damastown Walk	Roundabout	Manual Count	17/04/08
R156 Navan Road/ Main Street/ R 149 Clonee Road	3-arm Junction	Manual Count	17/04/08
Navan Road/ South East Slip	4-arm Junction	Manual Count	17/04/08
Damastown Walk/	4-arm Junction	Manual Count	17/04/08
R149 Clonee Road/ Stirling Road	3-arm Junction	Manual Count	17/04/08
R157 Navan Road (South of N3)	2-way	Automatic Count	15-28/04/08
Kennedy Road	2-way	Automatic Count	15-28/04/08
R156 Summerhill Road (North of Plunkett Hall)	2-way	Automatic Count	15-28/04/08
R157 Maynooth Road (North of Castlefarm)	2-way	Automatic Count	15-28/04/08
Rooske Road (South of Chestnut Grove)	2-way	Automatic Count	15-28/04/08
R149 (South of Barnhill)	2-way	Automatic Count	15-28/04/08
R156 Station Road (East of Larchfield)	2-way	Automatic Count	15-28/04/08
Navan Road	2-way	Automatic Count	15-28/04/08
R157 Navan Road (South of N3)	2-way	Automatic Count	17/04/08
R156 Summerhill Road (North of Plunkett Hall)	2-way	Automatic Count	17/04/08
R157 Maynooth Road (North of Castlefarm)	2-way	Automatic Count	17/04/08
R156 Station Road (East of Larchfield)	2-way	Automatic Count	17/04/08

The Registration Plate Survey and Manual Junction Counts were undertaken on the same day (Thursday 17th April, 2008) and both were undertaken during the ATC Survey period 15-28th of April 2008 as this allows for direct data comparison.

Preliminary Consultation

3 Preliminary Consultation

3.1 Introduction

Extensive consultation in the form of both stakeholder and public consultation will form an important part of developing and delivering constructive interventions in support of the study objectives. The primary aims of the consultations carried out were to:

- Gauge the opinions of the general public, local groups, businesses and educational institutions about existing conditions and future developments in the study area;
- Engage with relevant local authorities and transport providers; and
- Encourage a sense of ownership of the ensuing recommendations.

In this section the consultation process is outlined and the information received relevant to the Study is summarised. The section concludes with a brief discussion of the overall findings in the context of the study.

3.2 Stakeholder Consultation

An important element of the study is to examine the existing traffic, transportation, planning and land use issues highlighted during site observations and consultation, identify any barriers to mobility and accessibility, provision of public transport services within the study area, both for public and private transport services through the area and for members of the public.

Particular areas of interest from a stakeholder perspective include road safety, pedestrian and cyclist accessibility, parking, disability access, public transport infrastructure, junction operation, congestion, delivery management and land use. A process for carrying out preliminary stakeholder consultation was agreed with the Steering Group. The key stakeholders were identified and sent a consultation letter inviting written submissions from those who have information or suggestions which may be useful to the Study Team. An example of this letter is contained in Appendix B. At this stage of the project the identified key Stakeholders are summarised as follows:

- Elected Members of Council
- Meath County Council
- Fingal County Council
- National Roads Authority (NRA)
- Dublin Transportation Office (DTO)
- Government Departments and Bodies
- M3 Motorway Design Bodies
- An Garda Síochána
- Chamber of Commerce/Tourism
- Emergency Services
- National and Secondary Schools
- Religious and Educational Institutions
- Irish Rail
- Bus Éireann
- Dublin Bus
- Resident Associations and Groups
- Community Associations
- Local Clubs
- Tourism Bodies
- Mobility Impaired Associations and Societies
- Healthcare Bodies
- Road Hauliers Association
- Local Taxi Companies

Stakeholder Consultation

General Issues

- Government Policy – The IFPLUT must take into account current national, regional planning and transport policy (National Spatial Strategy, Regional Planning Guidelines, DTO Strategy and Transport 21)
- Study Area - The IFPLUT process should demonstrate that the extent of the proposed study area is of an appropriate scale, and reflects those areas more directly affected by the proposed rail line. The IFPLUT should take full account of the study area in its wider context, particularly regarding employment catchments, and the hierarchy of centres within the GDA.
- Scope of Study – the relationship and effect of development within the study area should be assessed particularly in relation to Blanchardstown and Navan.
- Strategic Issues – The IFPLUT should consider examine the potential of the strategic transport network as a key influence in the development of the study area.
- National Roads – The IFPLUT should adhere to the National Roads Authority Policy Statement on 'Demand Management and Access to National Roads'.
- Economic Considerations and Employment - The IFPLUT should address the need to clearly establish what the economic base is for the study area. Flexibility should be provided to allow for changes in the economy at regional, national and international levels.
- Public Transport Strategy & Capacity – The IFPLUT in considering development scenarios should include the introduction of a comprehensive public transport strategy to ensure adequate capacity is provided. Within the strategy the provision of infrastructure to facilitate public transport priority would be supported by public transport providers and operators.
- Local Issues – The IFPLUT process should identify local transport networks for all modes. This should be based on the hierarchy of walking, cycling, public transport and then car in its overall assessment.
- Retail land use - The level and distribution of retail in the study area, should take cognisance of the retail hierarchy pertaining to the wider area, and in particular the proximity of Blanchardstown as a Major town centre, and also the relative proximity of Navan by road, and in the longer term, rail.
- Development Scenarios – A range of population and employment scenarios should be tested and proposals which provide for sufficient flexibility in the phasing of new development in the study area. In general the IFPLUT process should have regard to the following issues with respect to each settlement
 - Development density and design
 - Land Use (location and type of development)
 - Strategic transport linkages and the provision for transport interchanges
 - Local transport networks, in particular walking/cycling networks
 - Park and ride

Meetings were also held with landowners within the study area, several of whom made written submissions during the preliminary consultation period.

3.3 Public Consultation

Public Consultation took place in the Dunboyne Castle Hotel on the evening of the 1st April and the mid-morning of the 2nd April (See Photos below).

Members of the general public were invited to attend and discuss the project with members of the study team. The public were informed of this consultation day by substantial local advertising through local papers, community information boards, announcements at church and on Meath County Councils website (www.meathcoco.ie). An example of the advertisement used is contained in Appendix C. Approximately 75 members of the general public attended the event.



Photos 5.1 and 5.2 – Public Consultation held Dunboyne Castle Hotel

During the consultation days the public were invited to discuss issues relevant to them and to make submissions and observations in writing to the Study Team on or before Friday 25th April 2008. The public were also given the opportunity to make written submissions on the day in the presence and during discussions with the Study Team.

Feedback from this preliminary consultation process has been received from groups and individuals through written submissions shown in Appendix D. A map identifying the location of land on which submissions were received is also included in Appendix D.

Public Consultation

General Issues

- Road Congestion - Significant congestion is experienced by motorists. Further development may increase this level of congestion.
- Road Safety - Volume and speed of vehicular traffic create road safety concerns in the area.
- Public transport - Public transport is not seen as a viable alternative by the majority.
- New train station - The potential for a new train station in the Sterling bridge area was suggested and that there was development potential on the surrounding lands.
- Green Belt - Green belt between Dunboyne and Clonee should be retained. Opinions were expressed that Clonee is considered an extension of Dublin where as Dunboyne feels like Meath. The status quo should be maintained.
- Flooding Issues - A plan to deal with flooding issues is required prior to planning any future development. The issue of major flooding north and south of Clonee Road was raised;
- Heavy Goods Vehicles (HGV's) – HGV's routing through Dunboyne to access the N3 creates hazardous conditions for all road users, particularly pedestrians and cyclists;

Detailed Issues

- Right turn at entrance to car park of Dunboyne train station should be omitted or redesigned as it appears to be of insufficient length for both safe vehicle deceleration and queuing and also lacks sufficient visibility for approaching and turning vehicles. Concern was raised regarding vertical and horizontal visibility afforded to motorists and pedestrians alike;
- Pedestrian access from Dunboyne to the above proposed train station was of great concern as at present this road (in particular near to and on the bridge) cannot be negotiated by pedestrian due to serious road safety concerns. These concerns are mainly raised due to high vehicles speeds, no footpath provision, bad bends and insufficient pedestrian space on the road verge due to vehicle safety barriers;
- Serious concerns raised regarding flooding issues in both Dunboyne and Clonee and especially adjacent to the proposed Dunboyne Train Station;
- The exiting priority 'T' junction between the R157 Navan Road and the N3 is a road safety hazard and can be very difficult to merge with N3 traffic at times.
- The existing and future Bracetown Business Park elements should be included in the study area as currently the existing business park has been included. Study area should extend as far as bypass road as the future development will extend to the bypass;
- A local bus service should be developed to connect with both the proposed train stations and also the existing and proposed centres of employment such as business parks, etc. This could also apply to the Dublin Bus service where additional routes could be added to incorporate the above;
- Concern over parking issues in Hillfarm and Larchfield residential estates in relation to the proposed Dunboyne train station parking. Issues were raised in relation to possible parking in their residential estates close to the proposed stations. This may occur due to both overspill (car park full) or cost (free parking in the residential estates). They raised the concern over why someone would use and pay for the park n ride when parking is free in nearby residential estates;

Public Consultation

Detailed Issues

- Inefficient and unsafe traffic light sequence and junction layout at Rooske Road/R156 and also at exit from N3 at Clonee.
- Poor lane markings at N3 westbound exit at Clonee on the approach to the traffic lights. Two straight ahead lanes to Clonee Village are provided but there is insufficient width for two vehicles on the junction exit. With proper lane markings a left turn only lane could be installed which would allow this left turn traffic to move while the straight and right turns are held;
- General lack of footpaths and public spaces within the study area and especially in centres of population. Particular reference to requirement for new footpath on Rooske Road on same side as Gaelscoile;
- Cycling is dangerous due to lack of facilities and large volume of HGV traffic and especially dangerous for children;
- School traffic creates congestion and safety issues.
- Bridge on Station Road (R156 Dublin Road east of Dunboyne) is very dangerous.
- HGV through traffic should be banned from Dunboyne town as such traffic causes serious safety issues for children;
- Uncertainty over pedestrian connections to Pace train station;
- Noise barrier at railway stations required to residential developments;
- Rodent control required during and post construction of railway;
- Current land use and planning generates inappropriate traffic volumes on local roads;
- Parking standards for new developments needs to be reviewed as the current provision of insufficient parking without the provision and opportunities for other modes of transport forces people to park on-street as they have insufficient parking in their house or place of work, etc;
- Speed limits need to be reviewed throughout Study Area. The speed limit in urban areas should be reduced while the speed limit between urban areas increased. It was suggested that the road (R156) between Dunboyne and Clonee should be raised from 50 kph to 80kph;
- Concern regarding the timeframe associated with delivery of M3 and the western bypass road of Dunboyne. The question was raised whether the bypass could be completed independent of the M3;
- Road and footpath issues in Clonee village were raised indicating that major upgrades are required as existing conditions are 'appalling'; and
- The turning movements of large vehicles in both Dunboyne and Clonee are causing deteriorating road and footpath condition.

The wide spectrum of opinions voiced reflects the differing experiences of the respondents. It is evident from the submissions that the majority of concern is focused on increasing road safety, accessibility, reducing traffic congestion, improving parking management, increasing pedestrian priority and ensuring that further development and land use in the area is completed in a sustainable manner and forms part of an overall transport strategy that safeguards the connectivity and permeability of the Study Area.

4 Policy Review

4.1

Introduction

The Policy Review chapter presents a review of the planning and transportation policies relevant to the study area. It highlights the most pertinent objectives and policies influencing the IFPLUT. It is divided into an analysis of specific planning policy that guides development in the Study Area and overarching non-spatial policy at both local and central government level.

Regarding spatial policy, the review considers the following:

- National Spatial Strategy 2002 - 2020,
- Regional Planning Guidelines for the Greater Dublin Area 2004 - 2016,
- DTO Strategy "A Platform for Change 2000 – 2016",
- DTO Transportation Strategy for the Greater Dublin Area 2010 – 2030,
- Draft Retail Planning Strategy for Greater Dublin Area, 2008 – 2016,
- Meath County Development Plan 2007 – 2013 and
- Dunboyne Integrated Action Area Plan, 2004 – 2010.

It also takes account of the spatial policies relevant to neighbouring areas namely;

- Fingal County Development Plan, 2005 – 2011;
- Hansfield Strategic Development Zone Planning Scheme 2006,
- Blanchardstown Catchment Area Integrated Development Framework and
- Kildare County Development Plan 2005-2011

However, the review does not purport to be a complete list of the relevant policies; it is intended to highlight key issues relevant to the Study Area.

Regarding non-spatial policies, the Study looks at the following:

- National Development Plan 2007 – 2013,
- Transport 21,
- Sustainable Residential Development in Urban Areas 2008,
- Residential Density Guidelines and
- Meath County Development Board, Le Chéile 2002 – 2012.

Together these documents provide key guidance and policy which will shape the strategy and future scenarios of the IFPLUT.

4.2

Spatial Policy

National Spatial Strategy (2002 – 2020)

The National Spatial Strategy (NSS) is a long term, strategic spatial planning policy document which aims to enable every part of the country to grow to its full potential while seeking to achieve a better balance of population growth and social and economic development. Its role is to set a context for regional development, to inform strategic investment and to set out spatially balanced policies and principles.

Concepts

Some of the Key Concepts of the NSS include:

- Potential: Potential is the capacity that an area possesses, or could in future possess, for development, arising from its endowment of natural resources, population, labour, its economic and social capital, infrastructure and its location relative to markets.

- Critical Mass: Critical Mass relates to size and concentration of population that enables a range of services and facilities to be supported. This in turn can attract and support higher levels of economic activity and improved quality of life.
- Linkages: Linkages in terms of good transport, communications and energy networks are vitally important to enable places and areas to play to their strengths.

Core Principles

The core principle of the NSS is Sustainability, which, when expressed through spatial planning policy, translates as policies which should:

- Maximise access to public transport, cycling and walking.
- Reduce distances from settlements to employment, service and leisure facilities.
- Make better use of investments in public services, including public transport.
- Contribute to the evolution of socially integrated communities, in urban and rural areas.
- Minimise consumption of non-renewable resources like soils, groundwater and agricultural land.
- Avoid adverse impacts on environmental features such as landscapes, habitats and river catchments and cultural heritage.

Dublin City

The NSS highlights the important role of the Greater Dublin Area nationally in the economic well-being of Ireland. It also points to the proportionate burden of development pressure such as housing supply and traffic congestion which falls on the area. It also refers to evidence that Dublin is becoming a 'Dispersed City' with persons commuting to it from up to 80km away. Section 2.4.1 states that balanced regional development depends on building a strong urban structure to give areas the economic strength to support a more balanced distribution of population across the country. In setting out the future spatial structure of Ireland, the NSS states that the performance of the GDA must be enhanced and physically consolidated to achieve balanced spatial development. The overriding spatial policy for the GDA is to make it more efficient, and in so doing ensure that (p. 39):

'The Greater Dublin Area's vital national role is secured in terms of improved mobility, urban design quality, social mix and international and regional connections.'

However, within the GDA it is not desirable for Dublin City to continue to spread physically into surrounding counties. Consolidation of Dublin is required for both the city itself and its public transport system to function effectively. This in turn will promote a more efficient and competitive Greater Dublin Area. It is clear from this, that areas such as Dunboyne, Clonee and Pace have an interdependent relationship with Dublin which the IFPLUT can enhance.

Towns

Regarding the County and town structure, the NSS sets out the need for (p. 39):

Balanced patterns of growth are supported by towns that capitalise on local and regional roles and are also linked to the roles of the gateways and development hubs.

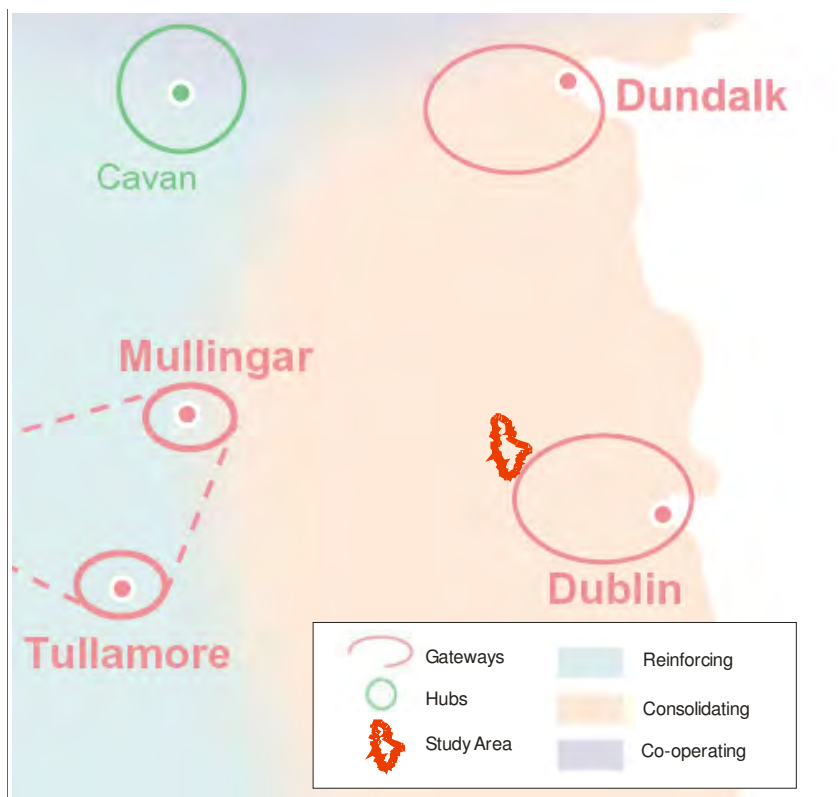


Figure 4.1 – The Study Area within the NSS

The Study Area is located within the Metropolitan Area of the GDA, and as such is in close proximity to and directly orientated toward Dublin City as the Gateway of the Region. The overall policy for the Study Area is consolidation and intensification. Figure 4.1 shows the area of Consolidation around Dublin City, shown in pink, with the Study Area superimposed in red.

The NSS also sets out what consolidation means for such areas:

- *Effective integration of land use and transportation policy within the spatial structure of the Greater Dublin Area*
- *Facilitating ease of movement of people and goods within the Greater Dublin Area*
- *Maintaining a high quality environment within the Area*
- *Clarifying the role of other urban areas within and at or near the edges of the Greater Dublin Area.*

This highlights that the most appropriate role for the Study Area in its relationship with Dublin considered by the NSS is to improve and maintain efficiency in its relationship with the City.

Rural Areas

It is important to note that the NSS highlights the interdependency of urban and rural areas and how an improved urban structure must be matched with specific strategies to strengthen rural communities. In economic terms, this means securing the capacity of agriculture to remain viable and simultaneously diversifying the rural economy. The NSS provides a typology of rural areas and suggests policy responses to deal with the specific issues facing these areas. The rural parts of the study area would be considered as 'Areas that are Strong'; Areas that are Strong are classified as:

'Mainly in the south and east where agriculture will remain strong, but where pressure for development is high and some rural settlements are under stress.'

The policy response provided by the NSS to this is to:

- *Support agriculture by maintaining the integrity of viable farming areas*
- *Strengthen rural villages and small towns by making them attractive to residential and employment-related development*

- *Reduce urban sprawl through a renewed emphasis on appropriate in-fill development.*

In terms of area, the majority of the Study Area falls into this category. As such, the IFPLUT must take cognisance of the function of the rural area surrounding the key settlements of Dunboyne and Clonee.

Infrastructure

Regarding infrastructure, p. 56 refers to the fact that infrastructural development also has a spatial element and will influence the location, timing and extent of development. In terms of transport infrastructure, the NSS states:

- Decisions on land use and development must take account of the existing public transport networks or support the emergence and development of new or augmented networks.
- To further implement the national strategy, the NSS sets out a regionalised approach to spatial policy.
- Strategy frameworks must be put in place to direct the development of cities and their hinterlands in an integrated way. Settlements and development strategies must be sustainable and transport-centred.
- The county town and large town structure should be strengthened as business generators and service providers.

Local Development

Chapter 5 sets out policies for the location of development, setting out the indicative policies in relation to the spatial and physical development arising from key industry sectors. Regarding employment, the NSS outlines specific supportive measures that need to be considered, including access to employment markets and effective spatial and transportation frameworks (p.94). Regarding housing provision, in highlighting the need to implement a strategic spatial framework for Ireland, the NSS emphasises the need to combine the location of housing with good transportation facilities and the need to ensure that housing requirements are matched by the supply of zoned and serviced land (p.94). Other policies the NSS prescribes include the strategic reservation of land through the development plan process, coupled with ensuring the timely and sequential release of land, to avoid delays in the availability and servicing of land on the one hand and premature release of zoned land on the other.

The NSS also sets out a number of tests which should be considered in the evaluation of locating housing development in urban areas:

- The Asset Test: are there existing community resources, such as schools with spare capacity?
- The carrying capacity test: is the environmental setting capable of absorbing development in terms of drainage etc?
- The transport test: is there potential for reinforcing usage of public transport, walking or cycling?
- The economic development test: Is there potential to ensure integration between the location of housing and employment?
- The character test: Will the proposal reinforce a sense of place and character?
- The community test: Will the proposal reinforce the integrity and vitality of the local community and services that can be provided?
- The Integration Test: Will the proposal aid an integrated approach to catering for the housing needs of all sections of society?

It goes on to illustrate other policies for the sustainable provision of housing in urban areas:

- Concentration of development in locations where it is possible to integrate employment, community services, retailing and public transport.
- Mixed-use and well designed higher density development, particularly near town centre and public transport nodes like railway stations.
- The efficient use of land by consolidating existing settlements, focusing in particular on development capacity within central urban areas through re-use of under-utilised land and buildings as a priority, rather than extending green field development.

- Avoiding environmentally sensitive areas in developing proposals for major extensions to built up areas.
- Placing a high degree of emphasis on creating living environments of the highest quality through attention to detail in urban design, integration of amenities, provision of facilities for children, older persons and sections of the community with special needs.

These policies and considerations will feed into the development of the next stage of the IFPLUT, which will see the development of base assumptions and scenarios.

Conclusions

The NSS recognises that the continuing growth and development of Dublin is dependant on maintaining the hierarchy of the Metropolitan area and a number of other strategically located towns as primary and secondary dynamic clusters such as Dunboyne, Clonee and Pace, outlined in the Regional Planning Guidelines for the GDA (see below). The NSS also provides guidance regarding a regional approach to the spatial development of the Country. In this regard, one of the key points of particular relevance to the study area:

"Frameworks for spatial planning of cities around the country and their catchments must be developed and implemented. This involves addressing the planning issues for Metropolitan and Hinterland areas of cities in an integrated way. Cities and surrounding counties must put in place sustainable and public transport-centred settlement and development strategies within the planning system to support continued progress and competitiveness into the future." (NSS, page 74)

The IFPLUT could be considered as such a framework. Also, the NSS considers economic activity as central to the aim of achieving spatial balance. An overall spatial framework is advocated, which would suggest in economic terms, inter alia:

"Complementary roles for other towns, villages and rural areas; various medium sized towns in each region will act as "local capitals" providing a range of services and opportunities for employment. Within the spatial framework proposed by the NSS, rural potential will draw upon local economic strengths, supported by a stronger structure of smaller towns and villages as a focus for economics and social activity and residential development." (NSS, page 98)

Regional Planning Guidelines for the Greater Dublin Area 2004 – 2016

The Regional Planning Guidelines for the Greater Dublin Area (RPG's) provide a planning framework for the Greater Dublin Area (GDA) and give regional effect to the National Spatial Strategy by developing its policies within the regional context. The GDA is comprised of the Dublin Regional Authority and the Mid-East Regional Authority, the two Regional Authorities made up of the seven counties in the GDA. As such, Meath County Council policy must have regard to the policies contained within the Guidelines.

The RPG's set out a Vision for the GDA which states that:

'The City-Region is to excel as an international competitor where all areas located within the Greater Dublin Area collectively contribute to its success and in turn draw their individual strengths from the City-Region.'

The settlement strategy proposed by the Guidelines divides the GDA into 2 areas – the Metropolitan Area, which relates roughly to the urban footprint of Dublin City and suburbs, and the surrounding Hinterland Area, which comprises all other urban and rural parts of the region. A distinct set of guiding policies and recommendations apply to each area.

The Study Area is also within the Metropolitan Area. Development at this location will be consolidated, with a much-enhanced, multi-modal transport system. Outside Dublin City, towns will be consolidated with an increase in overall residential development densities particularly in close proximity to public transport nodes. In contrast, settlements in the Hinterland are intended to become self sufficient with development concentrated into identified towns.

Population development is the key consideration of the RPG's: as such, it allocates a target of 15,237 units to Meath for the term 2003 – 2010. The RPG's also identify a settlement typology based on inter-urban relationships. These two settlement types are Primary Dynamic Clusters and Secondary Dynamic Clusters. The designation of clusters of settlements is based on an urban dynamism and relationship between constituent towns. The longer-term goal of the

Guidelines is that such centres should build a self-sufficient critical mass of complementary towns. As such, more local policy documents must accord with the RPG designations in directing housing development.

Within this, the RPG's identify five classifications of urban centres based on size and function, broadly in line with the provisions of the NSS. Development Plan policies must be tailored for each area to address the development issues that arise in relation to housing demand. In doing so, Development Plans must consider the location and quality of employment centres, residential developments and amenities in proximity to each other in order to reduce the need to travel and the dependence on private transport.

Dunboyne

The RPG's adopt the NSS designation of Dunboyne as a Town of 1,500 – 5,000 population. Figure 4.2 below indicates the location of the Study Area in red. The RPG's also recognise Dunboyne as a Level 3 Moderate Growth Town, due to its strong population growth and location on a multi-modal transport corridor, which includes motorway and rail. The economic function of Dunboyne is to perform as an attractor of substantial inward investment. Dunboyne, Clonee and Pace are located within the Metropolitan Area as well as in the Primary Dynamic Cluster of Dunboyne, Clonee, Ashbourne and Dunshaughlin. It should be noted that the RPG's consider that settlements of 5,000 persons and over are capable of retaining their populations.



Figure 4.2 – The Study Area within the RPG

Clonee

Clonee has grown dramatically since the adoption of the RPG's and as such should now be considered a 'Village or Urban Centre' as defined in the Guidelines. The RPG's state that the infrastructural and services base of such settlements should be developed in tandem with small levels of enterprise and that villages should be strengthened and orientated toward larger neighbouring settlements. The RPG's also state that smaller towns should have an interacting and supporting role to their larger neighbouring towns.

Key RPG Policies:

Some Key Policies considerations are:

- *Regarding the location of industrial and commercial development, the RPG's advocate the least restrictive approach to the zoning of enterprise land (p.73).*
- *The social, community and cultural needs of all persons and communities should be catered for through the provision of well dispersed and easily accessible social, cultural and community infrastructure (p.72).*
- *Ensure that development does not result in adverse impact on those living and working in the area.*

The Guidelines state that the realisation of the strategy requires that the necessary changes in the objectives and policies of each local authority be made. This enables cost effective and affordable services and infrastructure and enhanced access to services from rural areas.

Key RPG Concepts:

The RPG's follow a number of key concepts & development principles:

- *City Region: a cluster of urban centres separated by strategic greenbelts, with differentiated but complementary economies linked by a multi-modal transport network*
- *Compact-Dispersed Model: where constituent towns or settlements are compact in individual form yet dispersed in relation to each other.*
- *Settlement Hierarchy: smaller settlements clustered around and readily accessible to larger settlements to maximise accessibility to all services. In this way settlements are mutually dependent yet need not become one town in physical terms.*
- *Economic Clustering: the idea that economies of sub-regions may become specialised in particular sectors.*
- *Accessibility & Connectivity: Accessibility is the achieving the appropriate level and ease of accessibility for the appropriate user. Connectivity is the degree of choice of direct or indirect linkages.*
- *Multi-modal transport corridors and interchanges: refers to the complimentary arrangement of different modes of transport along corridors or at interchanges.*

Strategic Planning Policies, Metropolitan Area:

Section 7.4.1 sets out the strategic planning policies to be applied in the Metropolitan Area, some of which include:

- *Increase overall residential development densities as facilitated by the Residential Density Guidelines, 1999*
- *Carry out audits of vacant and under-utilised lands to assess their capacity for redevelopment*
- *Encourage the relocation of inappropriate land uses*
- *Promote the location of quality employment and residential developments in proximity to each other in order to reduce the demand for travel and the dependence on private car transport.*
- *Promote the development and densification of quality employment enterprise clusters of various sizes catering for a wide range of enterprise types.*
- *Seek consolidation by infilling and renewal*
- *Give priority to the implementation of recommendations presented in the DTO's Platform for change and subsequent reviews. The location of high density residential development and other developments that attract a large number of people, such as employment uses or major recreational facilities should be encouraged on transportation corridors offering access to a number of transport nodes.*
- *Ensure that green belt areas are kept free from encroaching development that could be more appropriately facilitated in town and villages.*
- *Accommodate rural generated housing need where deemed appropriate in areas of greenbelt and agriculturally used lands having regard to good design, servicing and siting in the rural landscape.*

Transport related Land Use Policy:

In addition, Section 7.5 overlays an additional policy zone, which corresponds to land within reach of a multi-modal transport corridor such as the Study Area. This policy highlights that development should ensure that all significant origins and destinations of travel are located as close as possible to multi-modal transport facilities. Appropriate density and quality design are key tools in achieving this, as is the development of local accessibility networks. Furthermore, in locations where undeveloped or Brownfield sites are adjacent to multi-modal transport facilities, well designed and appropriately dense development proposals should be encouraged.

In addition, regarding transportation and infrastructure, a number of important recommendations are made which can also inform policy at local level:

- *In the Metropolitan Area, public transportation and other sustainable modes should be given precedence over the requirements of the private car in all relevant policy and decision making.*
- *Except in exceptional circumstances, development proposals requiring direct access onto National Roads, outside of built up areas, should not be permitted.*
- *The provision of primary and secondary education facilities should be planned and implemented in concert with the planning and development of residential areas in order to maximise the opportunities for use of walking, cycling and public transport.*
- *Development Plans should include consideration of policies to delineate the city, towns and villages from the adjoining rural area by the designation of development envelopes, stop lines and contour thresholds as appropriate.*
- *Development Plans should, where appropriate, identify and designate urban fringe areas and include policies on appropriate land use in those areas.*
- *Each local authority should review the requirement for zoned lands and, where necessary, zone additional land at an appropriate review of the Development Plan, including a percentage allowance for land that may not be released for development.*
- *Additional areas for residential zoning should be selected on the bases of meeting all three of the following criteria: location within areas identified for development in the strategy; identified potential to be served by adequate public transport and identified potential for servicing by water supply, drainage etc.*
- *The mobility needs of businesses should be matched with the accessibility of different locations with the aim of increasing efficiency and reducing the need for private car through specific objectives.*
- *Consolidate the urban form of settlements by locating quality employment and residential developments of various sizes in proximity to each other in order to make effective use of suitable lands, reduce the need to travel and reduce the dependence on private car.*

Dublin Transportation Office Strategy “A Platform for Change 2000 – 2016”

“A Platform for Change” is a strategic transportation planning framework developed by the Dublin Transportation Office for the Greater Dublin Area. It is designed to compliment the land use policies contained in the Strategic Planning Guidelines for the Greater Dublin Area and by proxy, the Regional Planning Guidelines for the Greater Dublin Area. Figure 4.3 below illustrated the emphasis on integration of the transportation network, with Clonee visible at the western edge of the framework area.

The purpose (and policy) underpinning this strategy is set out in two inter-dependent strands namely:

- To increase the supply of transport, including a substantial expansion of the public transport network, some strategic road construction and traffic management; (infrastructure and service improvements) and
- To reduce the growth in travel through the application of complementary land use and other policies while maintaining economic progress. These policies are designed to encourage a transfer of trips, especially at peak periods, from the private car to sustainable modes (such as public transport, cycling and walking). These policies and associated measures are generally referred to as “Demand Management.



Figure 4.3 – “A Platform for Change”

The IFPLUT considers the future land use arrangement around Dunboyne and Clonee over the medium to long term. The necessity of the Study arose from the proposed completion of the Navan rail line and the M3 Motorway, and the increased development pressure they would bring. As such, the IFPLUT can make a considerable contribution to the above Strategy.

DTO Transportation Strategy for the Greater Dublin Area 2010 – 2030 (Draft)

The Dublin Transportation Office is currently reviewing the above transportation strategy which is due to be finalised for 2010. A number of provisional policy documents have been released for consultation; however, these are not reviewed here. The Draft Vision and Objectives set out an overall Vision and high level Objectives for the Strategy in response to public consultation. Some of the key provisional Objectives are;

- *'To strengthen communities';*
- *'To improve access to opportunities and accessibility; and*
- *'To improve economic competitiveness'.*

The publication of the finalised Transportation Strategy for the GDA is intended to be coordinated with the release of the Regional Planning Guidelines in 2010.

Retail Planning Strategy, Greater Dublin Area, 2001 – 2007

The Retail Planning Strategy (RPS) aims at guiding retail planning policies within the GDA. It classifies Dunboyne as a Level 4 Town-Local Centres / Small Town & Villages - within the Hinterland Area, serving a small, localised catchment. It is one of 12 no. towns / villages in this class. The RPS proposes to direct the short-term growth for County Meath into Level 1 (Navan, as the County Retail Centre) and Level 2 (Kells, Trim and Ashbourne). The Strategy Highlights Meath's weaker retail offer compared to other counties in the GDA and the high overall level of expenditure outflow from the County. It finds that Meath imports some convenience expenditure but exports a high level of comparison expenditure.

Draft Retail Planning Strategy, Greater Dublin Area, 2008 – 2016

In the Draft RPS, Dunboyne is designated as a Level 3 town - Town and /or District Centre and Sub-County Town Centre, alongside Ashbourne, Dunshaughlin, Kells, Trim and Laytown. It states that Dunboyne will be developed to a Level 2 town, alongside Navan, over the next 15 - 20 years. It sets out that policies for Dunboyne should promote its continued improvement to meet its Level 3 status, and to incorporate a range of convenience and comparison facilities to serve its catchment population. The strategy specifically refers to the role of the rail line, designated population growth and the IFPLUT.

The long term goal for Dunboyne is to meet the range of demands on a Level 2 centre; to offer the widest choice to the most people and to hold expenditure from its own market. In part due to the large floorspace deficit in Dunboyne, expenditure leakage has continued from the County. Furthermore, it is highlighted that counties Meath and Wicklow are the worst performers in the GDA. As such, the Strategy recognises that a longer timeframe and more floorspace may be required than what it proposes.

More specifically, it details that Level 3 centres usually contain groups of shops and at least 1 no. 2,500 sqm supermarket (net) as well as a range of other services. It also highlights that new residential areas will require retail provision to be developed alongside of an appropriate scale.

Meath County Council Development Plan 2007 – 2013

The Meath County Development Plan is the primary document setting out the development policies for County Meath and the Study Area to 2013. Under it, Dunboyne, Clonee and Pace are largely dealt with together due to their proximity to each other, their location on the Navan rail line and their location in an Area Under Strong Urban Influence from the GDA. They are designated as being part of a 'Primary Dynamic Cluster' with Ashbourne and Dunshaughlin.

Individually Dunboyne is designated as a 'Moderate Growth Town' (Figure 4.4, below). Such centres are envisaged as having an interacting and supporting role to their adjacent Large Town; in the case of Dunboyne & Clonee this means interaction with the wider Metropolitan Area. Together these designations mean that the majority of development and population growth in the County will be targeted at Navan and Drogheda Environs and secondly to locations such as Dunboyne and study area corridor (p.18).

Strategic Settlement Policy**Settlement Policy SP1**

'The Council will implement the Settlement Strategy of the Regional Planning Guidelines for the Greater Dublin Area by concentrating residential development into the designated Primary Dynamic Clusters of Navan, Kells & Trim, Dunboyne / Clonee, Dunshaughlin & Ashbourne and to the Large Growth Town of Drogheda'.

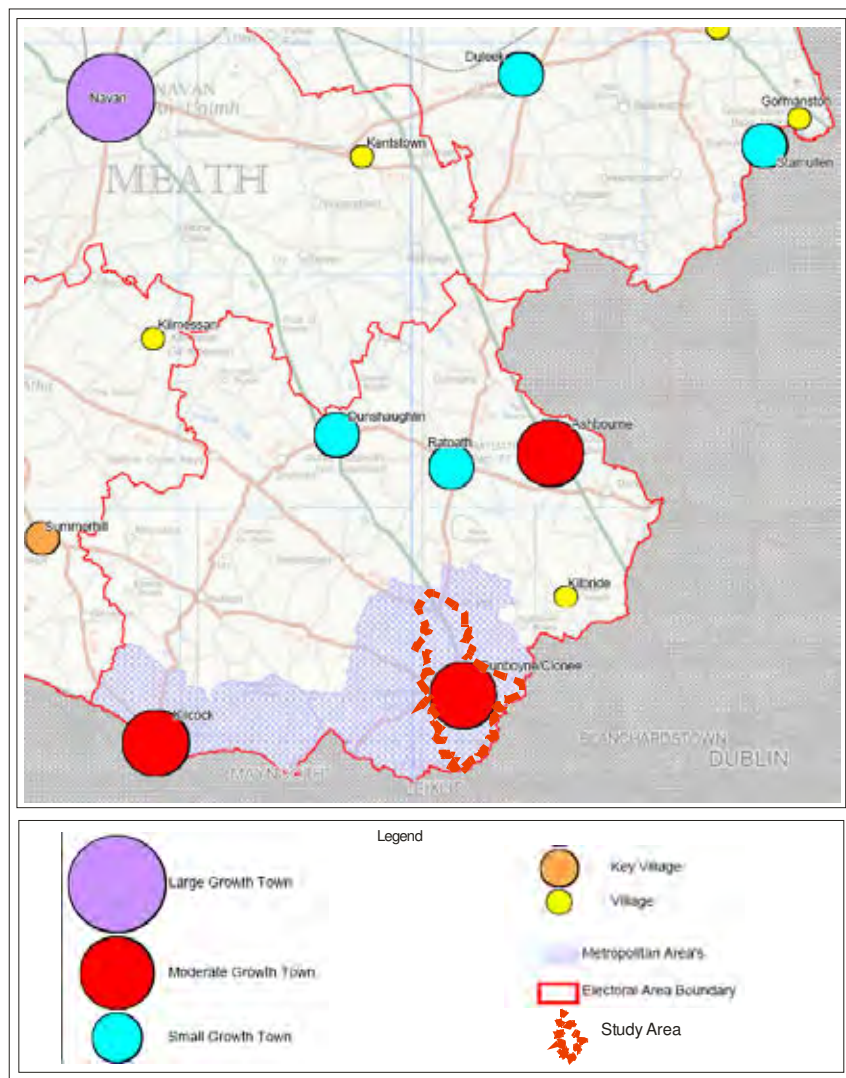


Figure 4.4 - Excerpt from the County Settlement Strategy showing Dunboyne as a Moderate Growth Town with the Study Area superimposed

Strategic Settlement Objective, 'SO2' provides for the preparation of the IFPLUT;

'To commence the preparation of an Integrated Framework Plan for Land Use and Transportation (IFPLUT) for the area of the Clonsilla to Pace Interchange corridor in Co. Meath including Clonee ... in conjunction with relevant public transportation bodies, the DoEHLG and Fingal County Council

Dunboyne – Clonee Land Use Policy

As Dynamic Cluster No. 2 (Figure 4.5, below), it is the objective of the Local Authority:

'To plan and provide a Strategy which would enable Dunboyne-Clonee maximise the potential and opportunities associated with its strategic location within the Dublin Metropolitan Area'.

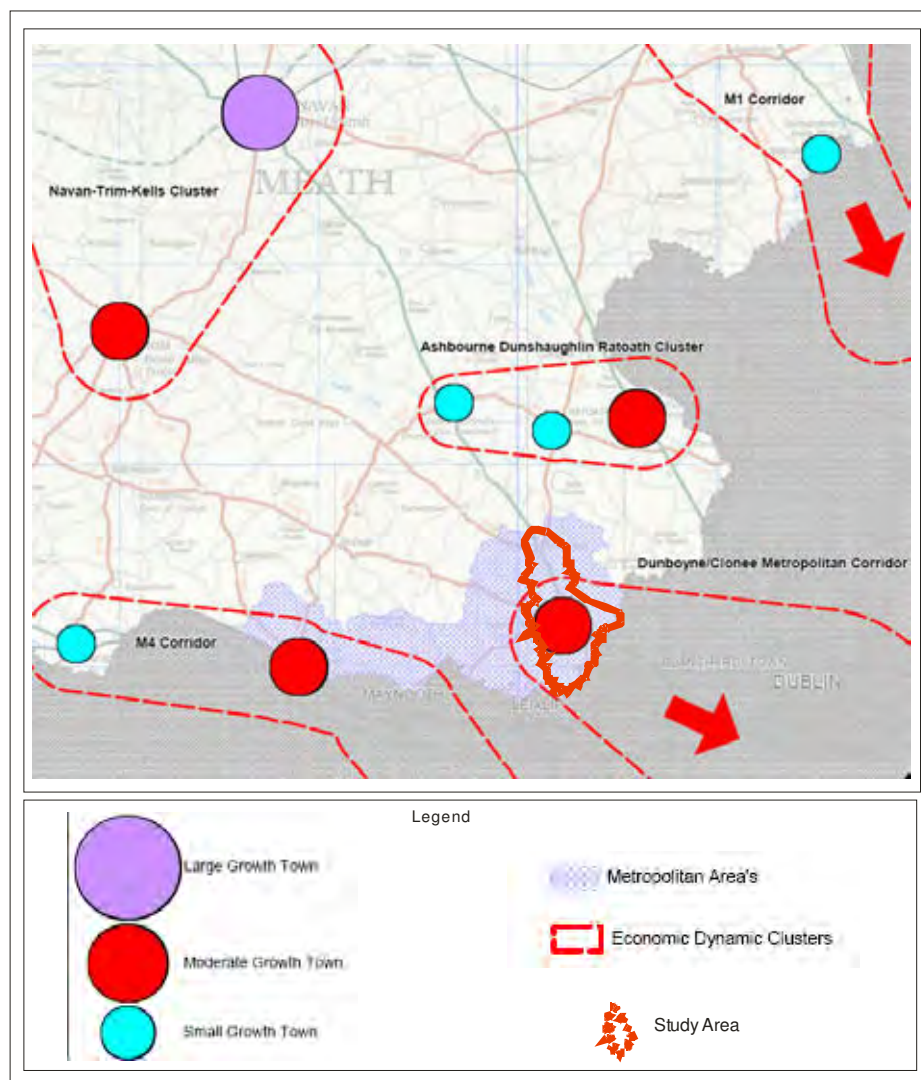


Figure 4.5 - Dunboyne & Clonee Dynamic Cluster, with Study Area superimposed

To implement this policy, the Council have set out a number of detailed Actions, which are required:

- Zone sufficient lands for employment generating activities at suitable locations
- Remove obstacles to zoning and development of lands for employment generating activities, incl. addressing issues such as land-banking
- Support provision of high quality business / office parks.
- Ensure adequate provision of incubator/start-up units
- Promote and provide for the preparation of LUTS for Dunboyne/Clonee and ITFS for the cluster as a constituent development centre (incl. Dublin).
- Provide for improvements in strategic road infrastructure
- Maximise opportunities afforded by new rail stations at Dunboyne & Pace as locations for economic activities
- Support adequate childcare provision
- Enhance social infrastructure provision e.g. housing, health, schools.
- Create a self-sufficient critical mass.

Retail

Regarding Retail, the Meath County Retail Hierarchy designates Dunboyne as a Level 4, Tier 1 Local Centre, within the Hinterland Area. This designation means that new large-scale retail development is not envisaged within the lifetime of the Plan. However, its position is to be reviewed as part of the LAP process in light of the RPG's. This review is due to be undertaken in 2008.

Rural

In terms of land use planning policy, the overall Study Area is designated as a 'Rural Area Under Strong Urban Influence'. This designation responds to the fact that while much of the area is rural, it exhibits characteristics arising from its proximity to the immediate environs or commuting catchment of Dublin. This means that rural land uses (agriculture, horticulture, equine and other land uses typically associated with the economic and social function of rural areas) are under considerable pressure to change to land uses associated with the economic and social function of peri-urban areas such as housing and light industrial, transport and industrial office land uses. Particularly pressure arises from the demand for one-off rural housing.

The 'Rural Area Under Strong Urban Influence' designation, in conjunction with the zoning policy in urban areas, seeks to retain suitable land uses and functions in the rural parts of the study area and to channel the pressure for non-rural land uses into existing settlements / urban areas.

Detailed Land Use Policy

It should be noted that the 2001 Detailed Objectives for Town and Villages such as Dunboyne and Clonee will remain in place until such time as the LAP's for those areas are prepared:

Dunboyne

A Land Use Zoning Map of Dunboyne is contained at Appendix E. Section 13.2.1 highlights that it is an objective of the planning authority to consolidate the centre of Dunboyne by, in particular, encouraging the infill and redevelopment of inconsistent land uses on the north side of the Village Green. Similarly, future development areas identified (13.2.4) in this Plan relate to infill sites such as the lands to the south of the Summerhill road.

The Specific Development Objectives for Dunboyne include:

- DB1: To consolidate the centre of Dunboyne as the focal point of the town for cultural, social and retail facilities and to encourage the provision of new retail uses subject to adequate access, car parking and environmental improvements in the Village Centre. Any such development will be expected to establish an agreeable and harmonious streetscape in keeping with the established village form.
- DB2: To facilitate the replacement of inappropriate uses and buildings with those that, by form and function further consolidate the village centre.
- DB7: To preserve potential sites for future rapid transit station facilities.
- DB8: To widen and improve the bridge over the Tolka tributary at the R157 on the Maynooth Road near Dunboyne Castle and adjacent to the town park to enhance pedestrian safety.
- DB10: To facilitate the improvement of the town park area in conjunction with local community groups as a major civic amenity.
- DB12: To facilitate the provision of pedestrian / cycling routes linking the rear of the schools and community leisure centre with community open space at the rear of the main street (zoned Community facilities).
- DB15: To preserve the Cow Park between Dunboyne and Clonee for public open space / community facilities.
- DB18: To facilitate the development of the 8 acre plot of land in the town centre owned by Meath County Council in accordance with the Councils statutory obligations.

Regarding zoning designations, aside from the lands east of the railway line, the majority of lands zoned within the settlement boundary of Dunboyne have been developed. There are three substantial areas of residentially zoned but undeveloped land alongside smaller individual plots in the town which amount to approximately 71 Ha. To the south of the town there is a tract of undeveloped land zoned for community, recreational and educational facilities (10 Ha) with two smaller areas of similarly zoned land within the town core of 1 Ha each.

Clonee

A Land Use Zoning Map of Clonee is contained at Appendix E. Clonee is designated as a local centre in the Dunshaughlin Development Area. The key Specific Development Objectives are:

- CE1: To strengthen the village core of Clonee by establishing a strong building line along the main street and facilitate appropriate mixed use/town centre type development in the village centre.
- CE3: To facilitate the relocation of uses from the main street of the village to facilitate urban consolidation
- CE4: To encourage the development of lands at the northwest end of the village for mixed higher density residential and business development.
- CE7: To provide for industrial, service and employment uses as indicated on Urban Detail Map 7 between the Clonee/Kilbride road and Meath/Fingal county boundary. Such development will only be considered in the context of an Action Area Plan (AAP) to be prepared either by the Planning Authority or any developer of these lands.
- CE8: To facilitate the development of individual executive houses, on the lands shown hatched on Urban Detail Map 7 to promote the sustainable development of the Business Park at Portan, Clonee, subject to 18 acres around Williamstown House being excluded to preserve the character and setting of the House and subject to the wastewater disposal system being connected to Fingal Drainage District.

Regarding zoning, of the total 5.7 Ha of town centre lands zoned, approximately 0.3 Ha remain undeveloped. In addition to this there is approximately 2.8 Ha of lands zoned for mixed residential and business uses in existing mixed use central business areas to the north of the town centre; of these 2.2 Ha are under construction or have recently been granted permission with the remainder available for development.

It offers approximately 12 Ha of residentially zoned land; of this 1 ha remains available for development. Permission was granted for residential development on the single largest area of residentially zoned land at the south of the town; 2.9 Ha has been developed, with the remaining 4.9 Ha under construction. An open space area of 1.8 Ha divides two large residential zoned areas.

A large area (89 Ha) of land has been zoned for light industrial and industrial office uses to the north of Clonee, which remains largely undeveloped.

Integrated Action Area Plan for Land East of the Railway Line, Dunboyne 2004

The non-statutory Integrated Action Area Plan (IAAP) applies to 42.5 Ha of land to the east of the rail line and to 7.69 Ha of land to the west of the line. Figure 4.5 outlines the IAAP area in red. The development of the lands is required under specific objective DB16 of the Meath County Development Plan 2001. The IAAP was developed in the context of the re-opening of the rail line to Dunboyne.

It states that in the County Development Plan the population target for Dunboyne for 2006 is 8,000 and for 2011 is 10,000 but that these figures do not take into account the change in status of Dunboyne from being located in the GDA Hinterland to the Metropolitan Area nor does it take into account the re-opening of the rail line. Accordingly, it states that the population projection can be revised to a figure above 10,000 for 2011.

Section 1.6.0, key aims and objectives include:

- *To ensure that all development is sustainable*
- *Development of the IAAP area does not exacerbate existing flooding problems in the town*
- *Promote a mixture of uses to ensure the sustainable development of the IAAP area. Buildings proposed for the area should be robust in their design to allow for future changes of use. In the case of new housing they should be designed with 'life change' in mind in terms of internal space standards and should be adaptable.*
- *Promote good access and linkage to the rest of the town and adjoining transportation network for vehicles, pedestrians and cyclists. Ensure phasing of development is consistent with future provision and improvement of roads.*
- *Promote areas of quality public and private open space utilising existing and proposed open space and green corridors*
- *Ensure development potential accruing from the reinstatement of the rail line is maximised.*

This is the largest single tract (approximately 72%) of residentially zoned and undeveloped land. The maximum density to be applied is 45 units per hectare net, with a lower density range of 35 – 45 units per hectare to be used also. This area is intended to be predominantly residential with an element of community, recreational and educational lands further east.



Figure 4.6 – IAAP Lands

Related Spatial Policy

Fingal County Council Development Plan, 2005 – 2011

The Fingal County Council administrative area adjoins the IFPLUT Study Area to the south east for a distance of c.6.5 km. The adjoining area is the extended Castleknock/Mulhuddart planning area, the main settlements of which are Blanchardstown, Castleknock, Mulhuddart, Ongar and Clonsilla. Figure 4.7 below, highlights the zoning policy active within the jurisdiction of Fingal County Council, in relation to the Study Area. The Science & Technology area north of the N3 and the Residential area of Ongar to the south are clearly visible.

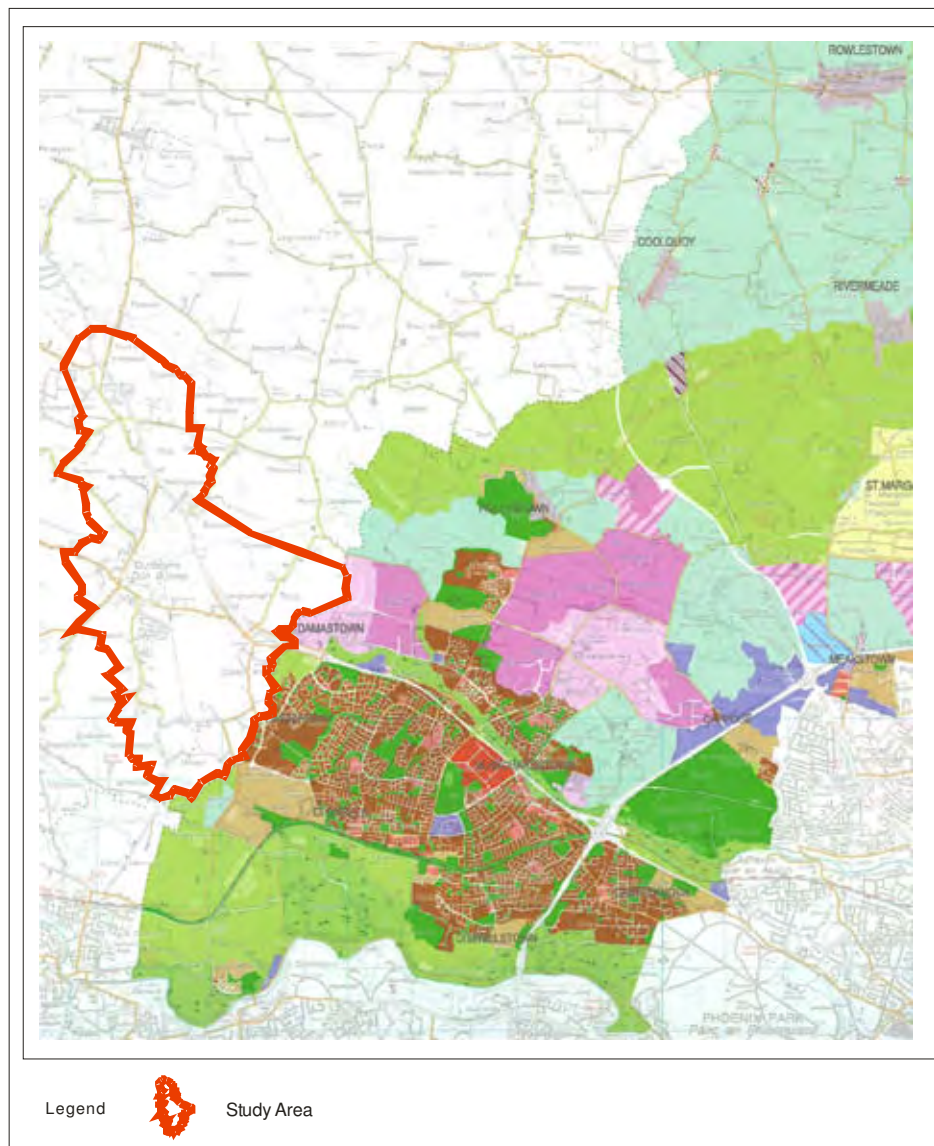


Figure 4.7 - Study Area in relation to land use policy of Fingal County Council and Blanchardstown.

There are a number of active policies immediately adjoining the Study Area in Fingal County Council. South of the M3 Motorway and north of the Maynooth rail line is predominantly suburban residential development, the predominant policy objective of this area is 'RS';

'To provide for residential development and to protect and improve residential amenity'

However, adjacent to Clonsilla the current policy objective is Green Belt:

'To preserve and provide for open space and recreational amenities.'

These suburban districts are known as Littlepace, Castaheaney and Hansfield and are orientated toward Ongar Village to the south east of the Study Area. Regarding Local Objectives for these residential areas, it is an objective of the County Plan:

- *To close the Hansfield Road from Ongar to the vicinity of Phibblestown House from vehicular traffic (Objective 346)*
- *To integrate Ongar Village with local pedestrian and open space networks and in particular with the proposed school campus at Phibblestown (Objective 357)*
- *To provide physical, visual and pedestrian integration of Ongar Village with the development lands at Hansfield (Objective 363)*

The pattern of development in this area contrasts with that of Clonee and the neighbouring rural area in County Meath. North of the M3, at Damastown and Tyrrelstown the predominant policy objectives are 'ST' and 'ST1' which provide for Science and Technology uses, ST:

- *'To facilitate opportunities for science and technology based employment'*

And ST1:

- *'To facilitate opportunities for science and technology based employment and associated and complementary uses in a high quality environment in accordance with an approved local area plan'.*

Development here is comprised of low intensity, science, technology and office parks and again, contrasts with the pattern of rural development adjoining in County Meath.

Hansfield Strategic Development Zone, 2006

In response to deficiencies in the supply of residential units within the Greater Dublin Area, lands at Hansfield, South West Blanchardstown were designated as a Strategic Development Zone (SDZ) under Part IX of the Planning & Development Act. This enables coordinated, large scale development of Greenfield lands for predominantly residential use and which will comprise a new rail dependent settlement. It is to make more efficient use of infrastructural provision in the area, with particular reference to a new railway station serving the lands. The SDZ shares a boundary with the IFPLUT study area for c.100m. Figure 4.8 below is an excerpt from the SDZ showing the zoning framework, with the adjacent IFPLUT boundary superimposed in red.

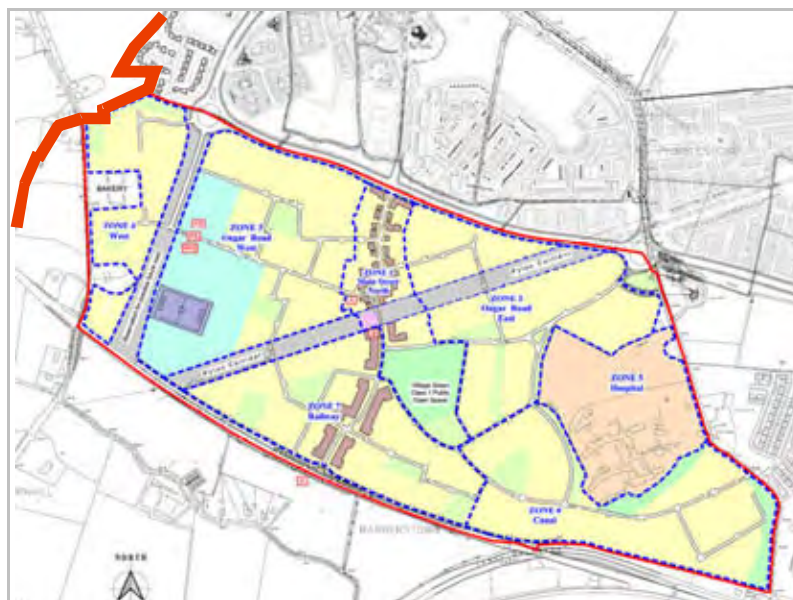


Figure 4.8 - The SDZ zoning framework with the IFPLUT boundary in red.

Some of the key elements of the SDZ are:

- *The SDZ incorporates 80 Ha of land, the main elements of which are: 54 Ha for residential development; 6 Ha for schools, 2 for Class 1 public open space.*
- *There will be a mix of 1, 2, 3 and 4 bedroom units,*

- *The average density will be 48 units per hectare.*
- *It will contain c.3,000 residential units with accompanying retail and community facilities.*

The main roads objectives for the SDZ are:

- *The completion of the Ongar Road extension*
- *Improvements to the Castaheaney Intersection*
- *Modifications of major distributor roads for bus priority, Ongar Road, Castaheaney Road*
- *The limitation of access to the Ongar Road and the close of Hansfield Road to through traffic*

The SDZ adjoins the IFPLUT study area boundary for approximately 500m. To date, groundwork's have been initiated; however, no date for completion is set.

Kildare County Council County Development Plan 2005 - 2011

It is worthy of note that the IFPLUT study area adjoins the administrative area of Kildare County Council to the south at Jarretstown for a distance of c.100m. However, as the shared boundary and envisaged level of development is negligible, consultation with Kildare County Council will proceed on an issue basis as deemed necessary.

Blanchardstown Catchment Area Integrated Development Framework (CAIDF)

The Blanchardstown CAIDF was prepared in tandem by Fingal County Council and the Dublin Transportation Office. The Study was carried out to prepare a land use and transportation infrastructure masterplan, with priority for public transport, for the Blanchardstown catchment area up to 2010. The CAIDF is an advisory document, similar to the IFPLUT and makes some important recommendations for the Blanchardstown area. While not directly applicable to the Dunboyne, Clonée & Pace area, the recommendations are relevant as Blanchardstown is the single largest settlement between the IFPLUT Study area and Dublin City Centre and is a major retail and commercial settlement for the Study Area.

Some of the core recommendations of the CAIDF are:

- The significant improvements that can be made by the development of bus priority routes and greater penetration of routes into housing estates.
- The importance and role of private car transport is acknowledged
- Park & Ride facilities are proposed to help reduce traffic congestion and encourage greater use of public transport.
- In the case of Blanchardstown, a dense mesh of both segregated and shared pedestrian and cycle routes are proposed to improve linkages and encourage local trips to be made by sustainable modes. In addition, such routes are proposed to help tackle high levels of car use.
- Densification of the settlement is proposed to include a reduction in surface level car parking and the reduction of severance between residential areas.
- The importance of developing residential and employment uses within the settlement centre is highlighted also.

While the detailed assessment of Blanchardstown may not be appropriate for the subject Study Area, the broad strategies applied will be of benefit to the IFPLUT Study Area and as such are highlighted briefly.

Non-Spatial & Central Government Policy

National Development Plan, 2007 – 2013

The National Development Plan is a broad investment programme which integrates a number of strategic development frameworks aimed at tackling infrastructural bottlenecks and deficits across a range of sectors. It integrates regional development within the NSS framework, by focusing on the physical and spatial development of Dublin and the other Gateways. Regarding infrastructural developments in the Study Area, The NDP is the framework delivering funding for the Navan Rail Line, the M3 Motorway and the Outer Orbital Route.

Regarding planning, it aims at providing a framework in which spatial planning can operate, referring specifically to the need to curtail suburban sprawl and direct future residential growth into higher density, smaller centres located around larger centres. The NDP highlights how more urbanised areas are growing and developing at a better rate than less urbanised regions. Importantly, it refers to the symbiotic relationship of urban and rural areas and the importance of the rural economy in attracting Foreign Direct Investment and the draw-backs of inappropriate, urban generated rural development. It highlights that 40% of the national population lives in rural areas, where agriculture and forestry are declining. It also notes the dependence of the rural economy on manufacturing, which is itself declining, on construction and natural resources and that 65% of rural enterprise is micro-enterprise (less than 10 employees).

Transport 21

Transport 21 forms part of the National Development Plan, providing the investment framework for infrastructural development and details specific infrastructural proposals. Figure 4.8 below illustrates the infrastructural proposals for the GDA.

Within the study area, these include the Clonsilla to Pace rail line, construction of which is to begin in late 2008; the completion of the Pace to Navan line by 2015 as well as the electrification of the line. It is anticipated the Study Area will also benefit from the public bus related proposals including a programme of investment to expand the bus network in the Dublin area, comprising integrated radial and orbital services with target to achieve a 60% increase in passenger carrying capacity through new and replacement bus acquisition.

External to the Study Area, the Metro West, an orbital metro line will run from Tallaght to Dublin Airport, will be linked with the Navan Rail Line through an interchange at Porterstown. This will greatly enhance the connectivity of commuters travelling from the study area to northern County Dublin and the Airport.

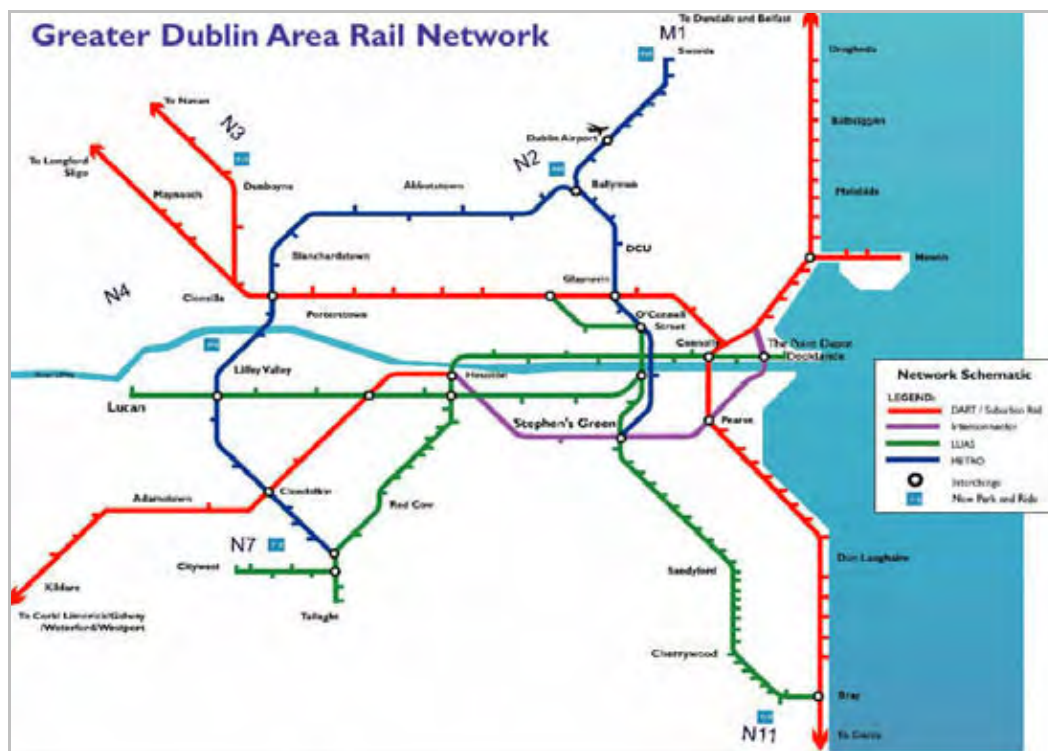


Figure 4.8 – Transport 21 Proposed Rail Network for the Greater Dublin Area

Residential Density Guidelines, 1999

The RDGs promote the need to increase density and provide guideline information for Local Authorities on how to do so appropriately. The inefficient use of increasing costly land, suburbanisation, re-urbanisation, congestion and increasing housing demand are highlighted as the central issues that demand increased density. The Guidelines state that making more economic use of infrastructure and serviced land will:

- reduce urban sprawl and ribbon development;

- reduce the need for infrastructural investment;
- improve access to centralised services and facilities and
- enable more sustainable commuting patterns

They also highlight the need for complimentary development densities between adjoining Local Authority areas.

The Guidelines provide a range of key points regarding the application of increased densities:

- For larger areas, an allowance of upwards of 25% of the total area must be set aside for non residential use such as main roads, local retail & employment, community facilities and major public open space.
- Gross density is a measure of the overall density applied to an area taking into account non-residential uses such as main roads, local retail and employment, community facilities and major public open space.
- Net Density is a more refined measure of density and is applied to smaller areas once the above non-residential uses have been accounted for.

The Guidelines also set out the most appropriate locations for and ranges of increased densities. In relation to town centre sites there should, in principle, be no upper limit on the number of dwellings that may be provided. On Outer Suburban or Greenfield sites, the Guidelines propose that the greatest efficiency in land use is made when a net density of 35 – 50 (14 – 20 per acre) dwellings per hectare is applied. The Guidelines go on to state that generally densities of less than 20 dwellings per hectare (8 per acre) should be avoided.

However, these provisions are provided with a list of caveats which protect the quality of residential developments such as avoidance of undue impact, public and private open space standards, preservation of the protected built and natural environment, building height, overlooking and overshadowing and compliance with plot ratio and site coverage standards. These guidelines and standards will be an important consideration in the development of scenarios and strategies for the IFPLUT.

Sustainable Residential Development in Urban Areas, Consultation Draft Guidelines for Planning Authorities, 2008

The Draft Guidelines respond to the increasing urbanisation of Ireland by providing principles to ensure that future development supports sustainable, integrated neighbourhoods within cities, towns and villages. The Guidelines emphasise the need for coordination in the delivery of spatial planning and emphasise the centrality of development plans and local area plans in sustainable urban development. The Guidelines focus on urban design and its role in delivering community focused urban settlements and provide a detailed methodology in how to achieve this. Crucially, it highlights existing policy documents pertaining to the delivery of key social services such as healthcare, education and amenity infrastructure, providing a policy framework for their integrated delivery. It also emphasises the need to coordinate urban development with the delivery of public transport infrastructure, with particular reference to the projects contained in the Transport 21 capital programme.

‘Le Chéile’ – An Integrated Strategy for Meath 2002 – 2012

Le Chéile is a ten year strategy for the economic, social and cultural development of County Meath developed by the Meath County Development Board. It provides a template to guide public services and local development acting at the local level, with the goal of bringing enhanced coherence to the planning and delivery of services. Spatially, the Strategy Framework reflects the policies of the County Development Plan but focuses on social and economic development. The main issues dealt with are; increasing total employment and productivity, diversification of the rural economy, highlighting Meath as an attractive location of inward investment specifically in high valued manufacturing sectors and internationally traded sectors and the coordination of economic, social and cultural infrastructure.

Land Use Issues

5 Land Use Issues

5.1

Introduction

This Section sets out an overview of the existing land use and development issues in the study area. The first section presents demographic analysis of the Study Area and its context, where the main characteristics are drawn out including recent growth trends and population composition. The differences between the 2006 Census figures and some key policy documents are noted. The second section sets out the existing land use situation within the Study Area, looking at the two main settlements of Dunboyne and Clonee, their rural context and the land use context of the Study Area itself. The final section presents more detailed concerns evident within the study area, arising from issues such as housing, retail and flooding. Finally, the overall key land use and development issues are highlighted.

5.2

Demographic Analysis

Population

A considerable amount of information on the population of the Study Area and its context is available. The majority of this information is derived from the 1996, 2002 and 2006 Census', which are considered here. Table 5.1 sets out the population change most relevant to the Study Area as a means of comparing recent and historical population change in the study area to the wider geographical context.

Table 5.1 – Population Summary					
Area	Year			% Increase	
	1996	2002	2006	1996-2002	2002-2006
State	3,626,087	3,917,203	4,234,925	8.0	8.1
GDA	1,405,671	1,535,000	1,645,000	9.2	7.1
Co. Meath	109,732	134,005	162,621	22.1	21.4
Dunboyne ED	5,471	7,757	8,702	41.8	12.2
Study Area	-	5,919	7,335	-	23.9
Dunboyne Town	3,080	5,363	5,713	74.1	6.5
Clonee Town	-	173	1,000	-	478

Source: CSO, Census' 1996, 2002 & 2006

State & Region

It is clear that population growth for the State between 1996 and 2006 was relatively consistent at c. 8%. While consistent, this is a particularly high level of growth at State level. Similarly, regional level growth (GDA) remained relatively constant and, on average, was similar to the State level of 8%. Meath experienced much higher levels of sustained growth over the decade at c.20%. The contrast between the State/regional growth levels on one hand and that of Meath on the other highlights the spatial disparities in the location of population growth over the period.

County Meath

From 1996 to 2002 the population of County Meath increased by 24,273 persons; this roughly equates to the current population of Navan moving into the County over a 6 year period or the current population of Kells moving into the County on a yearly basis. The population increase of 22.1% between 1996 and 2002 was the highest experienced by any County over the same period. This population growth was accounted for by natural increase of 6,402 persons (26.4%) and estimated net migration of 17,802 (73.6%). As highlighted, comparing State/regional growth to that of County Meath on one hand to that between County Meath and its constituent towns on the other indicates the disparities between the locations of population growth.

5.3

Study Area

The Study Area lies entirely within the ED of Dunboyne; however, no data relating solely to the Study Area is available from the Census or CSO. As such the population for the Study Area can

be derived from the 2006 Census, the CSO Small Area Population Statistics (SAPS) and from the GeoDirectory Data from An Post (Table 5.2).

Table 5.2: Meath County, Dunboyne DED & Study Area Population Change			
Area	2002	2006	% Increase 2002-2006
Co. Meath	134,005	162,621	21.4
Dunboyne ED	7,757	8,702	12.2
Study Area	5,919	7,335	23.9

Source: CSO, 2002 & 2006 Census and An Post Geo Directory data

It is clear from the above that in 2002 the Study Area comprised c.76% of the population of the Dunboyne DED: by 2006 this had risen to c.84%. As the remainder of the Dunboyne DED outside the Study Area is rural, and in the context of the larger population growth between 2002 and 2006 in Dunboyne and Clonee (1,117 persons) compared to the DED (945), this highlights the tendency within the DED and the Study Area towards urban development.

Demographic Profile

While the 2006 Census information does not take account solely of the Study Area, the Study Area comprises a high proportion (c.84%) of the Dunboyne DED and so we are able to infer that many of the characteristics of the Dunboyne DED demographic profile apply to it.

Table 5.3 - Private Household Composition, Dunboyne DED	No.	%
Total Private Households	1,624	100
One Person	168	10.3
Husband & Wife: or couple	216	13.3
Husband & Wife (or couple with children of any age)	919	56.5
Lone Mother with children of any age	132	8.1
Lone Father (with children of any age)	24	1.4
Husband & Wife (or couple with other persons)	14	0.8
Husband & Wife (or couple) with Children (of any age) and other persons	46	2.8
Lone Mother with Children (or any age) and other persons	10	0.6
Lone Father with Children (of any age) with other persons	3	
Two family units with or without other persons	23	0.1
Three or more family units with or without other persons	-	-
Non-family households containing related persons	32	1.9
Non-family households containing no related persons.	37	2.2

Source: CSO, Census 2006

Age Structure

The age structure of a population depends on past trends in fertility, mortality and migration. Over the last number of decades the age profile of the Irish population changed substantially. Generally, the dependency ratio (sum of people in the 0-14 and the 65+ age cohorts expressed as a percentage of the working age – 15-64) consistently declined in the past and reached a low point in 2002. This can be attributed mainly to a fall in birth rates since the 1980's. The 2002 Census also revealed an ageing population in Ireland.

The 2002 and 2006 SAPS provide data concerning age groups only on a DED level (Table 5.4).

Table 5.4 – Age Cohorts, Dunboyne DED				
Age Cohorts	2002		2006	
	Actual	%	Actual	%
0-14	2,076	26.76	2,164	24.87
15-24	1,225	15.79	1,359	15.62
25-44	2,508	32.33	2,780	31.94
45-64	1,459	18.81	1,785	20.51
65+	489	6.31	614	7.06
Total	7,757	100	8,702	100

Source: CSO, 2002 & 2006 Census

It is clear from the above that the population is divided relatively evenly between the ages of 0 – 64, with the largest groups in the 0 – 14 and 25 – 44 cohorts. Table 5.4 indicates large adult populations that have young families.

Households and Household Sizes

Table 5.3 & 5.4 highlight that by far the majority of the population lives within a family unit of 2 no. parents (mother and father) and children of any age. Just under two-thirds of the population are involved in this family arrangement. The next largest group is adult couples without children. These figures highlight the family orientated nature of the resident population in the Study Area.

Regarding Household Size, the 2006 Census finds that the average household size in County Meath is 2.99 persons per household. The level is slightly higher for households in the rural area, at 3.07. In contrast, it is slightly lower than average in urban areas at 2.93. In 2002, the average household size for the County was 3.17; the average for urban areas was 3.07 and for rural areas was 3.25. This drop in size is typical of the majority of locations nationwide and is linked to lower birth rates, higher headship rates and greater monetary autonomy of young adults. This has implications for the provision of housing stock in that urban housing requires a variety in sizes to best suit the needs of smaller households.

Employment

Total Employment

The 2002 and 2006 SAPS provide employment data on DED level. The SAPS distinguish between “unemployed” and “those seeking work for the first time” (Table 5.5). For the purpose of this exercise both figures are included in the ‘unemployed’ group. The “Labour Force” is defined as the sum of those people aged 15 and over who are at work and those who are unemployed. The “Participation Rate” is the proportion of persons in the workforce aged 15 and over, expressed as a percentage of all persons in that age group. The “Unemployment Rate” is the proportion of all people unemployed expressed as a percentage of all persons in the Labour Force.

Table 5.5 Dunboyne DED – Principle Economic Status											
Persons aged 15+		At Work		Un-employed		Labour-Force		Participation Rate		Un-employment Rate of Workforce	
2002	2006	2002	2006	2002	2006	2002	2006	2002	2006	2002	2006
5,681	6,538	3,449	4,148	138	173	3,587	4,321	63.1%	66.1%	3.8%	4.0%

Source: CSO, 2002 and 2006 Census

The above data highlights that while the number of those at work rose between 2002 and 2006, so did the unemployment level. This correlates with the widely recognised low jobs to population ratio for Meath and that while the population and job creation is increasing; the former has outstripped the latter.

Table 5.6 – Employment Sectors						
Sector	At Work 2002	Unemploy ed 2002	At Work 2006	Unemploy ed 2006	% Change at work	% Change Unemploy ed
Farming/ Fishing and Forestry	47	0	43	0	-8.5	0
Agricultural	40	1	28	2	-30	100
Manufacturing	325	6	445	9	36.9	49.9
Building and Construction	248	12	374	17	50.8	41.6
Clerical and Office	310	10	409	9	31.9	10
Administrative & Government	537	4	564	10	5.0	150
Transport	213	2	244	5	31	150
Sales	543	12	623	24	14.7	100
Professional	625	7	796	13	27.3	85.7
Services	278	6	365	13	31.2	116.6
Other	283	53	257	71	9.1	33.9
Total	3,449	113	4,148	173	20.2	60

Source: CSO, 2002 and 2006 Census

Between 2002 and 2006 the number of persons working in Farming, Fishing, Forestry and Agricultural employment has decreased (Table 5.6), which again is typical of the national trend. All other employment sectors increased their number of workers. The relatively balanced spread of employment types highlights that the population is not overly dependent on or exposed to one particular sector.

Population Data from Key Policies

NSS Population Figures

Regarding population estimates, the NSS envisages Dunboyne performing as a Town of 1,500 – 5,000 population located on a National Transportation Corridor. The 2002 Census designates Dunboyne has having a population of 5,363 which increased by 74% from 3,080 in 1996. Clonee is not mentioned specifically in the NSS but is recorded as having a population of 173 in the 2002 Census.

Regional Planning Guidelines GDA Population Figures

Regarding population, the RPG's took account of the strong population growth recorded in the 2002 Census and recorded Dunboyne as a Moderate Growth Town of 1,500 – 5,000 population. The 2006 Census shows Dunboyne as having a population of 5,713, seeing its level of growth slow to 6.5% from 74% between 1996 and 2002. In turn, Clonee is not specifically mentioned in the RPG's however the 2006 Census recorded its population as 1,000 persons; an overall increase of 478% from 2002.

Meath CDP Population Figures

The Meath County Development Plan deals with Dunboyne, Clonee and Pace together as the Dunboyne / Clonee / Pace Corridor. Table 6 of Chapter 2 designates locations for permissible housing growth from 2006 to 2013. The projected number of new households for the Corridor from 2006 to 2009 is 1,150. Applying an occupancy rate of 3.0, this gives an additional population of 3,450. The projected number of new households from 2010 to 2013 is 2,400; as above, this would give a total population of 7,200. The total number of new households projected over the period 2006 to 2013 for the corridor is 3,550 or 10,650 persons at a household size of 3.0. However, the CDP states that these figures will have to be reviewed in the context of the 2006 Census. The medium term population horizon for the corridor is 25,000; however, the relationship of this figure to the projected number of permissible housing units in the CDP is unclear.

Land Use

Study Area

Existing Land Use

The Study Area is predominantly comprised of Agricultural or Greenfield lands (approximately 75%). Of this, the majority are in agricultural and associated land uses either active or inactive. This is reflected in the Meath County Development Plan Chapter 8, Table 26 (Map 15), and Landscape Character Assessment. This identifies the non-urban areas within the study area as 'Agricultural Land' or 'Natural Grassland' and being of a 'Lowland Landscape' type. Within this, lands to the north of Dunboyne are categorised as 'Ashbourne-Dunboyne Farmland' and lands to the south and east of Dunboyne are categorised as 'Dunboyne Farmland'. These categorisations relate to the sensitivity and importance of the land within a national, regional and county context.

A small proportion of the land in the Study Area outside of the main settlements of Dunboyne and Clonee is in residential or related use; typically single rural housing (Table 5.7). It is not possible to ascertain the proportion of residential units within this rural area which are related to agriculture. Accordingly, it is estimated that in total 5% of the land in the Study Area outside of the two no. main settlements are considered to be in residential use but unrelated to agricultural.

Urban and associated land uses make up the majority of the remaining land use within the Study Area (approximately 15%). This is mainly comprised of the settlements of Dunboyne and Clonee. Their particular composition is examined below. The Landscape Character Assessment in the County Development Plan also indicates the area around Dunboyne and the area between Pace and Blackbull as predominantly being of Built Environment land uses.

Table 5.7 – Proportion of Existing Land Uses within the Study Area.					
Land Use Type	Urban	Rural/Agricultural	Rural Residential	Other Uses	Total
%	15	75	5	5	100

(Meath County Council, GIS, 2008)

The remainder of land within the study area is typically comprised of other land uses such as infrastructure and services as well as other miscellaneous uses that do not fall into the other two categories and are not normally associated with such large areas.

5.4

Urban Areas

While the majority of the geographic Study Area is comprised of rural land, pressure for development largely arises from and is channelled to urban locations. The primary urban area is Dunboyne, followed by Clonee. Pace is also considered here due to the particular and important arrangement of transport infrastructure planned for the area.

Dunboyne

Existing Land Use

Dunboyne is located adjacent to the south-east boundary of County Meath, approximately 19 km from Dublin City. It lies 2 km west of the N3 National Primary route with the R156 and R157 regional routes dissecting the village centre. Within the Study Area it is located mid-way along the western boundary.

Dunboyne functions primarily as a residential settlement and a local commercial, retail, social and employment centre. The substantial demand for housing in Dunboyne is largely driven by its location within the Metropolitan Area of the Greater Dublin Area (GDA) and by its intrinsic role as a developing residential settlement for the employment centres of the Dublin region.

In terms of urban form (Figure 5.1), suburban residential development adjoins the older village core in an arc from the North West to the south east. This is bounded by the proposed railway line to the east, which has historically inhibited development eastward. This substantial and relatively recent residential development (c.106 Ha) around the periphery represents a different pattern to that of the historic core (c.6 Ha). (The 2002 population was accommodated on some 90 Ha of residentially developed land). Development to the west and south of the historic core has been minimal. Dunboyne is essentially a village surrounded and increasingly defined by suburban residential development; in terms of area, it is estimated that 82% of the land take of

the town is given to residential uses, with approximately 6% given to the town centre lands and 12% to community, educational and recreational land uses (Table 5.8).



Figure 5.1: Aerial photograph showing the extent and arrangement of Dunboyne within its hinterland.

Table 5.8 – Existing proportion of land uses within Dunboyne				
Land Use	Residential	Town Centre	Community, Educational and Recreational	Total
%	82	6	12	100

(Meath County Council, GIS, 2008)

Much of the recent growth comprises residential development around the mixed use historic core. However, a cluster of community uses adjoin the town centre to the east (13 Ha) and south (5 Ha) and a cluster of industrial and related uses are located to the north of the town (6 Ha).

The Integrated Action Area Plan for Land East of the Railway Line (52 Ha) is the largest single tract (approximately 72%) of residentially zoned and undeveloped land. The lack of zoning and development to the east of Dunboyne reflects the barrier of the railway line and lack of suitable crossing as well as the extent the 1:50 and 1:100 year event flooding pattern.

There is a total of 70ha of undeveloped land zoned for residential development in Dunboyne. The net developable area amounts to 52.5 ha. Applying a density of 30 dwellings per hectare and a household size of 3.0 persons per household equates to a developable yield of some 1,575 units or 4,725 persons.

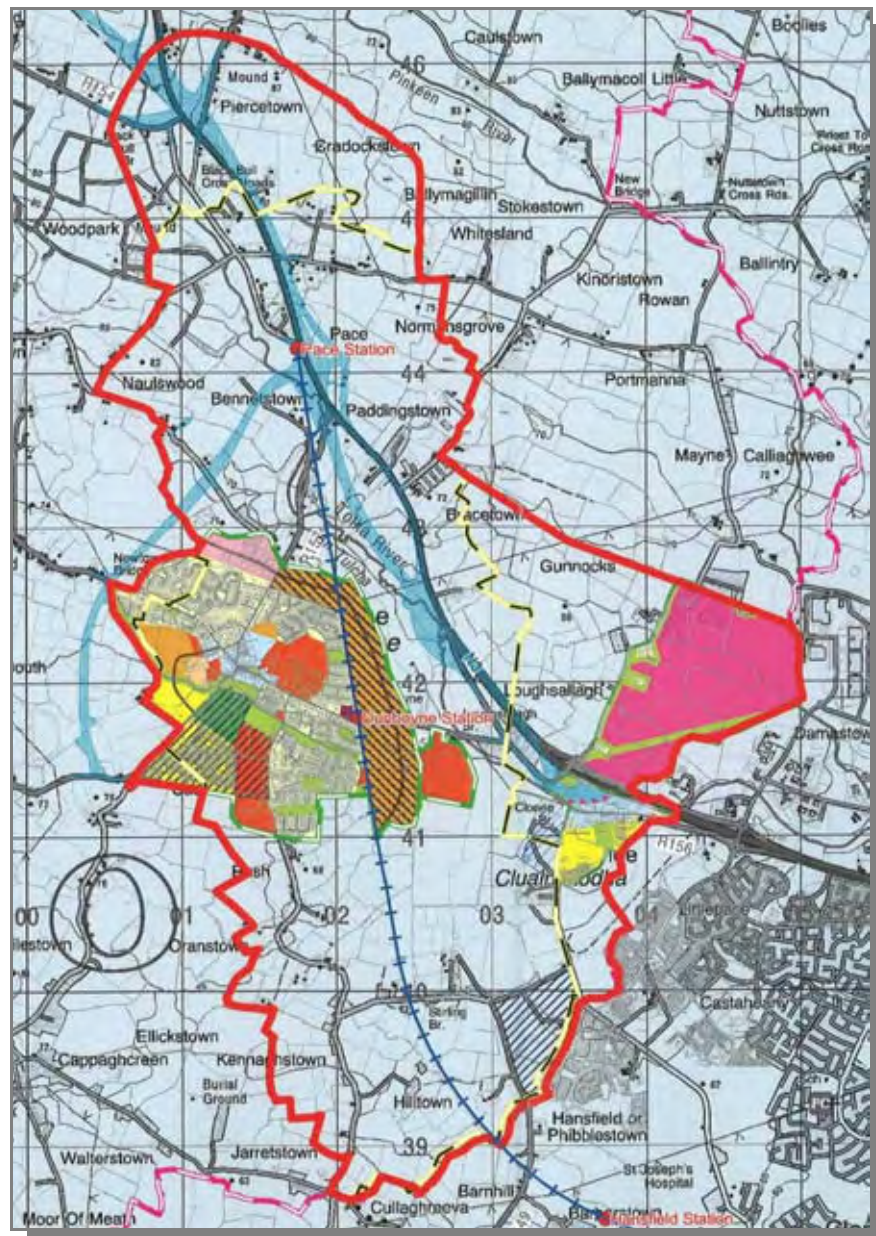


Figure 5.2 - Study Area showing Dunboyne and Clonee land use policy.

Clonee

Existing Land Use

Clonee is located 2 km south-east of Dunboyne and is adjacent to the N3 Dublin/Navan Road on the Meath-Dublin border. The village is located 16 km from Dublin City Centre and 3 km from Blanchardstown Town Centre. Within the Study Area it is located at the south eastern side and is approximately 750m from Mulhuddart and Clonsilla in Fingal County.

Clonee offers a highly localised level of service, functioning as an outlying service centre for the surrounding rural area. Despite its proximity to the neighbouring residential development in Fingal County, Clonee bears little functional relationship to it. It consists of one street (Figure 5.2) which is poorly defined, with a mix of commercial and residential units arranged in an informal manner along the main street. The village centre land uses amount to approximately 5.4 Ha. of developed land (Table 5.9). Approximately 1 Ha. of developed mixed residential and business lands lie between the village centre and the M3 Motorway corridor.



Figure 5.3: Aerial photograph of Clonee Village showing its structure and ongoing residential development to the south.

Table 5.9 – Existing Proportion of Land Uses in Clonee				
Land Use	Town Centre	Mixed Use	Industrial / Industrial Office	Residential
%	5.2	2.6	10.9	81.3

(Meath County Council, GIS, 2008)

There have been two new recent residential developments to the south of the town, one of which is disconnected from the village centre in terms of location (Figure 5.3 above). In total there is approximately 5.8 Ha. of developed residential land in Clonee. In addition, adjacent to the village, some small scale ribbon type development has occurred near the junction of the Dunboyne Road and the old Navan/Cavan Road at Loughsallagh. It is apparent, therefore, that in terms of land take, Clonee is evenly divided between Residential and Commercial land uses. This indicates its service function as opposed to that of a predominantly residential settlement.

Clonee has a small commercial core and is spatially imbalanced in terms of the relationship of its residential and town centre/central business area components. The original orientation of Clonee to the east appears to have been set by the Tolka flood plain to the west. The proximity of the motorway to the north to the village centre orientates development southward. The proximity of the boundary with Fingal County Council and the suburban developments of Mulhuddart and Clonsilla hinder coordinated development eastward. These issues curtail the balanced growth and development of the village and push growth southward away from the existing village core.

As set out in the Policy Review Section, there is little additional zoned but undeveloped town centre and residential land within Clonee, however, there is some room for intensification of the existing zoned land. All of the residentially zoned land in Clonee is located to the south and east of the commercial centre, which leaves it spatially imbalanced. Applying a gross to net development ratio of 70% to allow for roads, parking, open space etc there is a net developable area of 1 ha. Applying a density of 30 dwellings per hectare and a household size of 3.0 persons per household equates to a developable yield of some 30 units or 90 persons.

It should be noted that there is considerable light industrial and office industrial related uses clustered to the north east of Clonee at Damastown within Fingal County. These uses are examined in more detail in later sections below. In terms of scale and location, the lands north of Clonee zoned for light industrial and industrial office uses are largely in response to the pattern of existing development within Fingal County Council at Damastown and relate little to Clonee as a settlement. In this way, the Industrial zoning is disproportionately large in the context of its functional relationship and proximity to Clonee. As such the future relationship of the two and the impact of these lands on Clonee once developed are unclear.

Pace

Pace is a townland c.1.5km north of Dunboyne town. The townland and surrounding area is currently rural and comprised of agricultural land with a number of individual residential units in the form of ribbon development in the vicinity. The existing N3 road and old rail corridor traverse these lands, largely following an identical route along this stretch. It should also be noted that two relatively large employment nodes are located close to the townland (within a 1km radius of the proposed Pace Interchange); the Kilsaran plant and Garden Works to the north with Bracetown Industrial Estate and the Hun Logistics Park to the south east.

The Pace Interchange between the M3 Motorway and the distributor road to the west of Dunboyne (both currently under construction) will be located in this area, just south of the existing residential units (Figure 5.4). As part of this, the Pace Park & Ride facility is also planned to be constructed at this junction and will comprise 1,200 car-parking spaces. The Park & Ride facility is intended as a facility to cater for private car based commuters travelling to Dublin from the wider County Meath area to access the Navan – Dublin rail line once it opens.

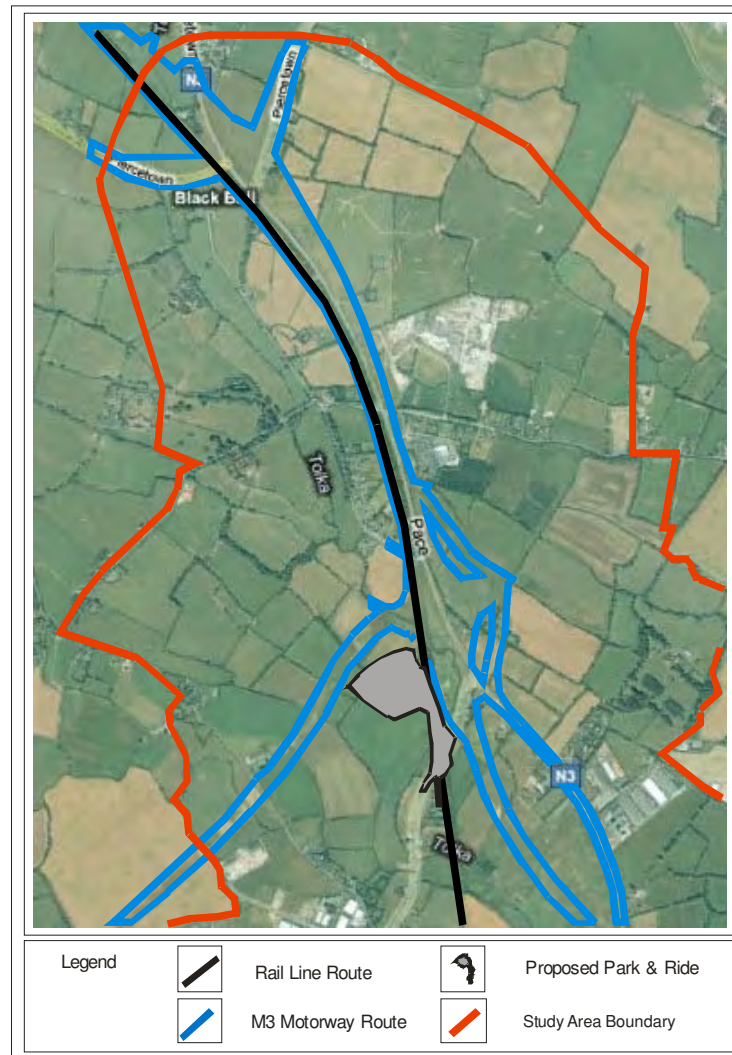


Figure 5.4: Aerial photograph of Pace at the northern end of the Study Area. The layout of the proposed M3 is outlined in blue with the proposed location of the Park & Ride facility in grey.

The existing area, while rural in nature, has a high level of through-traffic generated predominantly by the N3. Once the proposed infrastructural works are completed, this through-traffic will be intensified considerably. The degree of infrastructure planned will alter the character of the area to that of a transportation hub. This situation will bring considerable pressure for new forms of development dependent on good transportation linkages, which will in turn pressurise the surrounding rural area. The future role of the Pace area is a key issue to be dealt with by the IFPLUT.

5.5

Detailed Issues

Residential Development

The location and type of residential land uses within the Study Area is particularly relevant due to the role of Dunboyne and Clonee as predominantly residential settlements. One of the primary reasons for the IFPLUT being commissioned is the need to devise a co-ordinated strategy for the long term growth and development of residential land uses in the Study Area particularly as it has been developing spatially on the basis that the car is the primary mode.

Rural Residential Development

Individual houses are located throughout the rural parts of the Study Area, largely following the local road network. This is clearly visible in the accompanying map; Appendix F; it shows an excerpt from An Post's GeoDirectory 2008 which maps the location of all postal addresses in a particular area. In 2008, within the Study Area but outside the settlements of Dunboyne and Clonee there were 235 residential postal addresses (units) recorded. Based on an average household size for the rural areas of Dunboyne of 3.07 (2006 Census), this gives an approximate population of 722 persons. For comparative purposes, the population of Clonee in 2006 was 1,000. As almost all trips within the rural area are private car based, this highlights the potential impact of this rural population compared to their urban counterparts. These individual units have, over time, developed into ribbon development along the road network. Areas such as Bracetown, Blackbull, Piercetown, Pace, Kennaghstown Loughsallagh and Portan are notable for the presence of ribbon development.

Historically these residential units were linked mainly to the local agricultural economy active in these areas. Recent growth in demand for residential units in the rural areas of the Study Area has been driven by subsequent generations which are not necessarily linked to the local rural economy but have strong social and family links to it. However, increasingly pressure for individual rural housing is generated by those with no social or economic connection to the rural area.

Dunboyne

The more recent residential development in Dunboyne town has largely been suburban in nature comprised of large scale, low density, detached residential housing estates. Figure 5.5 – 5.8 illustrate the type, design and character of this development. While the detailed design and character of these housing estates varies, the overall concept and layout remains relatively constant, being one of low density, disconnected, car based suburbs. A more detailed extract from An Post's GeoDirectory (Appendix F) clearly illustrates the suburban housing layouts applied to the expansion of the town.



Figure 5.5 – 5.8 - Typical Suburban residential development, Dunboyne

This form of residential development now comprises approximately 80% of the footprint of the town. As jobs and other activities move further away from Dunboyne town centre, the density has remained low and the structure of the urban area has loosened, and subsequently the use of the private car has increased. However, the most recent phase of the expansion of Dunboyne has been comprised of a more varied format which includes apartment and duplex units (Figure 5.9 & 5.10). This form of development has almost wholly been applied to the south western quadrant of the town. The variety in this layout provides for a number of different types of dweller. However, much of this development has progressed as a single phase and as which, while the unit type and layout are varied, it remains largely car based with little integration to the fabric of the town centre. This is an issue which must be addressed by the IFPLUT.



Figure 5.9 & 5.10 - Contemporary Apartment & Duplex development, Dunboyne

Large, suburban housing estates, once developed, are particularly difficult to redevelop due to the robustness of residential use, the integrated nature of their design and the difficulty in site collection. This is a particularly important issue for Dunboyne as there are a number of large housing estates in close proximity to the town centre. As such this leaves little room for the necessary expansion of the town centre commercial and retail core. Again, this is an important issue for the IFPLUT to deal with.

Table 5.10 below, sets out the recent larger scale residential planning history for Dunboyne:

Table 5.10 – Notable Residential Planning Applications, Dunboyne

Location	Status	No. Units	Reg. Ref. No.
Dunboyne	Live	-	-
	Granted	8	DA30278

In comparison to Clonee, below, there is little current activity; however, there have been a number of relatively recent residential developments around the town.

Clonee

There is almost a ratio of 2:1 in favour of lands developed for residential use to town centre uses in Clonee. Most of the recent residential development in Clonee has been to the south of the town due to the impact of the 1:100 flood event flood plains, to the west and the M3 Motorway to the north (Appendix F). In contrast to Dunboyne this development has taken the form of apartment and duplex development which is well integrated to the town centre (Figure 5.11) but also more suburban style development to the south which is detached from the village centre. Nevertheless, there are a number of more traditional units within the commercial centre (Figure 5.12). However, as with Dunboyne, Clonee is presented with a number of problems as to its spatial development which are well highlighted by its recent residential development.



Figure 5.11 & 5.12: Contemporary duplex/apartment development and more traditional residential units in Clonee.

Table 5.11 below, sets out the recent larger scale residential planning history for Clonee:

Table 5.11 – Notable Residential Planning Applications, Clonee

Location	Map No.	Status	No. Units	Reg. Ref. No.
Clonee	1	Live	19	DA801105
	2	Live	42	DA801441
	3	Granted	59	DA70275
	4	Granted	25	DA70608
	5	Under Construction	99	DA40501
	6	Under Construction	377	DA30209

The spatial distribution of these applications is illustrated on Figure 5.13 below.



Figure 5.13: It should be noted that Reg. Ref. DA40501 is located outside the development boundary of Clonee, and is situated c.550m to the south.

It is clear that there is much more activity in comparison to Dunboyne, in terms of extant permissions, current applications and developments under construction.

5.6

Retail

Within the Study Area, retail and associated services are almost solely located within Dunboyne and Clonee, with Dunboyne providing the majority of service types and floorspace. Retail provision outside of these settlements is small in scale and typically supplied by petrol filling stations. For the purposes of the IFPLUT, retail provision is assessed as convenience and comparison floorspace being the primary consideration and retail services and other uses as the secondary consideration.

Convenience floorspace is defined in the Retail Planning Guidelines 2005 and generally comprises floorspace dedicated to the sale of perishable, edible goods such as food and alcohol. Comparison floorspace generally is dedicated to the sale of other goods which would normally be required by a household on a regular basis and which are generally non-edible goods and include clothes, medical products or books. For the purposes of this study, retail services/office is comprised of those services offered within the settlement such as hairdresser, accountant, travel agent where goods do not typically form part of the standard transaction. Other uses for the purposes of this study comprise floorspace typically found in a settlement but not contained in the other three categories and include restaurants, take-aways, pubs or premises for the sale of bulky goods.

Dunboyne

The quantum and quality of convenience and comparison floorspace is of primary concern in determining the health of a settlement. Table 5.12 sets out the existing retail provision in what is considered the retail core of Dunboyne town; a complete list of the existing provision within the retail core of Dunboyne is contained at Appendix F. Appendix F illustrates the arrangement of town centre uses in the wider town area around and the area of the town considered as the retail core for this study.

Table 5.12 – Existing Proportion of Uses within Dunboyne Retail Core.								
Use Type	Conv.	Comp.	Service	Other	Community	Residential	Vacant	Total
No. Units	7	10	27	12	3	9	2	71
%	9.8	12.9	39	18.3	4.2	12.6	2.8	100
Floorspace, sq.m.	996	672	-	-	-	-	-	-

Convenience Floorspace

Convenience retail provision in Dunboyne is relatively poor compared to a typical settlement of similar population. There are 4 no. main convenience retailers in the town; 580 sqm, 27 sqm, 28 sqm and 65 sqm. For a town of over 6,000 people with a notable rural catchment population this is very low; typically, a supermarket of 2,500 sqm could comfortably serve a population of between 3,000 and 5,000. However, the town centre and retail core appear to be in good health as suggested by the quality of existing providers (Centra, Londis and Eurospar), the presence of newer formats (Eurospar) and most notably the very low level of vacancies (<3%). The low level of convenience floorspace provision suggests a high level of leakage to other centres.

Comparison

The poor comparison offer, particularly of higher grade comparison floorspace is typical of settlements in close proximity to other larger centres such as Blanchardstown, Liffey Valley and Dublin City.

Scale & Type of Commercial Development

Figure 5.13 and 5.14 illustrate the type of commercial development within Dunboyne. Figure 5.13 shows existing commercial units within the retail core which consists largely of converted single and two storey residential units. At the fringe of the core and throughout the wider town centre (Figure 5.14) there is a high proportion of small scale purpose built developments with small, ground floor commercial units accompanied by residential and commercial units at first floor. This type of development is commensurate with a town of this size. The Eurospar unit is the only purpose built convenience retail unit within the town and represents a new phase in the commercial development of Dunboyne. It is clear from the above that in terms of stock, Dunboyne has seen strong, relatively recent redevelopment; however those units and developments coming on line remain small in scale.



Figure 5.14 & 5.15: converted commercial units and contemporary purpose built commercial development.

Town Centre Spatial Growth

Spatially, as highlighted above, the growth of the town centre is constrained by a number of well established land uses which surround it (Figure 5.16). There is a collection of Greenfield sites adjoining to the north east of the town centre which would be ideal to cater for the quantum of commercial floorspace and typical large footprint formats which serve towns of this size. Adjoining to the north, St. Patrick's Park is comprised of two-storey, detached and low density residential development. While such development is resistant to the expansion of the town centre, over time such development can more easily facilitate commercial expansion than other forms of development, such as more recent forms of low density suburban housing.



Figure 5.16: Illustrates the impact of surrounding suburban residential development (yellow), community/education development (red) and open space and the Dunboyne Castle Hotel (green) on the expansion of the town centre (blue).

There are a number of low density, detached and semi-detached suburban housing estates adjoining the town centre to the north west, north east and south east. This type of residential development is particularly robust as are the school and church sites to the south west and east of the town centre. Again, such uses are robust due to the social and community use, state funding and the large size of the sites. It should also be noted that the 1:100 flood event flood plain expands to the west, to the rear of the residential development along Summerhill Road. There is no reliable information as to the exact extent of this floodplain and as such acts as a natural barrier to the expansion of the town centre to the west. These features act as blocks to the necessary expansion of the town centre.

The Draft Retail Strategy for the Greater Dublin Area sets out Dunboyne's eventual development to a Level 2 Centre alongside Navan. The above lack of retail floorspace provision highlights the very high quanta of floorspace needed to bring the town to the planned status and particularly the difficulties in facilitating this expansion spatially. Large areas of low density, suburban residential development and also large community/school sites surround the town centre, offering little room for expansion. This dichotomy presents a challenge to the sustainable development of the town. These issues will be a key consideration in the development of future scenarios.

Clonee

No retail core has been defined for Clonee due to the fact that it is a single street with poor urban form, definition and commercial provision. As such the uses along the entirety of the main street are here considered. As there is no defined retail core, the existing ribbon development along the approach roads to the town has a disproportionate impact on the proportion of uses. However, the settlement is considered to be weak in terms of retail offer. Nevertheless, for its size, it has relatively good convenience floorspace provision which includes a discount food retailer (600 sq.m.) and two small newsagents. It has minimal comparison floorspace provision which is normal for a village of its size in close proximity to a larger settlement and Dublin City. However, this, together with the low proportion of service uses and the high proportion to other and residential uses, and the fractured structure of the settlement, highlight the weakness of the settlement in terms of commercial provision. The development currently underway in the Village Table 5.13 sets out the breakdown of existing provision in the settlement, which is mapped in Appendix F.

Table 5.13 – Existing Proportion of Town Centre Uses, Clonee.								
Use Type	Conv.	Comp.	Service	Other	Community	Residential	Vacant	Total
No. Units	4	2	9	13	1	21	2	52
%	7.6	3.8	17.38	25	1.9	40.3	3.8	100
Floorspace, sq.m.	99	192	-	-	-	-	-	-

Scale & Type of Commercial Development

Clonee is typified by small scale, ground floor commercial units. These largely form part of converted residential units (Figure 5.17 & 5.18); however there are a number of more modern purpose built commercial developments (Figure 5.19 & 5.20). While the more recent development is a positive addition, the mixture presents a poor urban form in terms of style, height, line and design. Furthermore, Clonee has developed in a linear fashion along the main street and has only recently seen backland development. Also, the expansion of the commercial centre of Clonee, as with Dunboyne, is curtailed spatially. The 1:100 year event flood plain runs to the western boundary of Clonee. The M3 Motorway prevents development to the north. The recent and ongoing residential development to the south prevents the expansion of the town centre in that direction. As such, the only viable direction for the town centre to grow is to the east into Fingal County.



Figure 5.17 & 5.18: older units converted for commercial development, Clonee



Figure 5.19 & 5.20: purpose built commercial units, Clonee

5.7

Retail Services

There is a range of services in Dunboyne and Clonee to serve the study area. These include the typical services such as hairdressers, video shops, pharmacies, pubs, restaurants, off-licenses, bookmaker and a drycleaner. There are also higher grade services including; 2 banks, a post office, 2 estate agents and a solicitor. The range of services is considered adequate for the catchment population.

5.8

Community Facilities

The Study Area is well served by community, medical and recreational facilities, the majority of which are located within the settlements of Dunboyne and Clonee. Maps contained in Appendix F show the location of the main facilities within the two settlements.

General Community Facilities

Aside from educational facilities, there is a broad range of general community facilities within the Study Area (Appendix F). In Dunboyne there is a Catholic and a Protestant Church; the Old School Hall, the Parochial House, as well as a Library and REHAB Resource Centre. There is a Nursing Home in Clonee. These services indicate a strong and relatively diverse community presence within the Study Area. However, in the face of rapid and large scale expansion such facilities and networks can come under threat and as such must be provided for in a balanced manner.

Recreation & Sports

The existing sporting and recreational facilities in Dunboyne (Appendix F) include; St. Peters GAA Club; Dunboyne AFC Soccer Club; Dunboyne Athletic Club; Dunboyne Tennis Club; the 1st Meath (Dunboyne) Scout Group and a Health and Fitness Club housed at the Dunboyne Community Centre. There is a small tennis club and a Pitch & Putt course in Clonee (Appendix F). Dunboyne and Clonee offer an adequate provision of sport and recreation facilities for the current Study Area population. However, additional facilities are required. A larger population base will require the provision of not only more facilities but also larger, more developed and divergent ranges of sports clubs and facilities. The quantum of lands zoned for Community uses may largely be taken up by the provision of sporting and educational facilities. As such, additional lands zoned for Community uses will be required to facilitate the development of the requisite facilities; however, it is recognized that some of this provision will be met through PPP mixed use developments within commercial areas of the two main settlements.

5.9

Childcare Facilities

There are currently 13 commercial childcare facilities in the area. The Department of Education's Childcare Guidelines have established a minimum requirement of 1 childcare facility per 75 dwellings in new housing areas. Applying the minimum standards in the Guidelines, there is a requirement for 30 childcare facilities. This is particularly relevant as there is a large commuter population resident in the area. Childcare facilities are located throughout the settlements of Dunboyne and Clonee within town centre, community and residential developments.

5.10

Medical Facilities

The HSE has established an optimum standard of 1 doctor per 2000 population. Dunboyne has 5 doctors, which equates to 1 doctor per c.1,600 population and is therefore in excess of the

optimum standard. In addition, there is one Medical Centre in Dunboyne and a second in Clonee (Appendix F). It is worthy of note that there is an existing development adjacent the Eurospar facility which is currently for lease and has full planning permission for a Medical Centre. However, the target increase to 25,000 within the study area will require an associated increase in medical facilities.

Education

Dunboyne town serves the entire Dunboyne DED, with 4 no. primary schools, 1 no. post primary school and 1 Third Level Institution. Maps included in Appendix F highlight the location of these institutions within Dunboyne.

Primary Level

In calculating the primary school going population, the Department of Education assumes that 13.5% of a population will be of primary school going population. In the Dunboyne DED (2006/2007) there were 1,176 children of primary school going age. In the 2007/2008 school year there were 1,279 children enrolled in the 4 primary schools; this highlights that the schools are catering for a catchment that extends beyond the DED. Below is a breakdown of the current enrolment of each school:

- Dunboyne Junior National School - (infants- second class) – This school has 17 classes and an enrolment of 529 students (2007/2008). The school is almost at full capacity and could only accommodate a maximum increased intake of 1 or 2 pupils per class at present.
- Dunboyne Senior National School - (third class - sixth class) – This school has 16 classes and an enrolment of 499 students. There is minimum spare capacity in some of the classes.
- Gaelscoil Tulach na nOg (Dhun Buinne) – This is a primary school and with an enrolment of 153 students. At present, the school only goes up to 5th class. The school has recently relocated to 'The Pond' area, Rooske Road, Dunboyne.
- St. Peters National School – This is a primary school with an enrolment of 98 students. It is currently at full capacity and cannot accept any additional pupils.

Currently, all 4 schools are reaching or have reached full capacity. Based on current demographic trends, the Department of Education have plans in place to accommodate 1,728 additional primary school child places. Dunboyne Junior School and Senior School are both to expand to 24-classrooms schools. Gaelscoil Dunboyne is currently in temporary accommodation on Rooske Road, with plans in place for a permanent 16-classroom school on that site. St. Peters National School is currently located on lands adjoining the Protestant Church but requires a site for a new school; it is projected this will be at least an 8-classroom school. Based on existing and planned provision, the Department of Education is satisfied that there is capacity on the existing sites to approximately 2011 – 2013. It has no formal plans beyond this timeframe.

Post Primary Level

Regarding post primary level children, the Department assumes that 8.5% of the total population at any time is of Post-Primary school going age. There is 1 post-primary school in the Study Area:

- *St. Peters College* – This is a mixed post primary school and enrolls 928 students. The school has very limited spare capacity for additional students.

Currently, St. Peter's College is operating at or near full capacity. Regarding the provision of Post Primary school places the Department has based its calculations on Dunboyne reaching a population of 10,000 in 2011. At this population, a post-primary school going population amounts to 850 students. This highlights that St. Peters College is already catering for a larger population than its intended catchment. However, plans to provide an extension to cater for 1,000 pupils are at an advanced stage. This will nonetheless cater for the population until 2011.

Future Primary and Post-Primary School Provision

The population of the Study Area is intended to grow to 25,000. For the purpose of the IFPLUT Study, the estimated future demand for Primary and Post-Primary places was calculated based on this figure and in the context of a number of key policy documents. These documents are:

- *The Provision of Schools in the Planning System 2008 (Department of Education & Science),*
- *The Development Plan Guidelines for Planning Authorities 2007, Appendix F (Department of Environment),*
- *The Department of Education & Science School Calculations Formula 2008,*
- *Technical Guidance Documents 020, 022 & 025 Department of Education & Science*

The Department of Education's 2008 information on existing provision in the Study Area (above) was also considered. In the context of the lack of plans from the Department of Education beyond 2011, it is estimated that demand for the provision of Primary and Post-Primary places from a population of 25,000 can be catered for on the existing lands zoned for Community use on Main St., Rooske Road and the Clonee Road Sites (Appendix F). At this population and based on the above standards some spare capacity would remain.

However, the next stage of the IFPLUT Study must consider the most appropriate location for Schools in the context of the wider developments envisaged in the Study Area. In particular, the lack of adequate town centre sites to facilitate the expansion of the town centre question the long term viability of Dunboyne Junior National School, Dunboyne Senior National School and St. Peters College operating from their existing town centre locations.

Third Level Provision

There is one Third Level educational Facility in the Study Area; Dunboyne College of Further Education. While the college operates from a building within the Dunboyne Industrial Estate, it shares some facilities with St. Peters College. The College of Further Education provides a range of courses and mainly serves demand from Dunboyne and Clonee.

Zoned lands circa 12.6 Ha. to the south-east of the town Dunboyne, which are proposed to cater for community uses, including school provision. These lands will be considered by the Department of Education in their projections post 2011.

Employment Uses

Employment uses in the Study Area are located in a variety of locations. While Dunboyne and Clonee are the main settlements, and do host a number of important employers, there are also a number of employment centres outside of these settlements. While within the rural area, these employers are generally not related to the agricultural economy. The Economic Development Board of Meath County Council retains information on employers within Meath County Council which can be broken down for the Study Area; however participation by employers is voluntary and as such is incomplete. Therefore, information on employment is limited.

Regarding Dunboyne, the current level of job provision is low, with approximately 1 job for every five persons; hence there is a large commuter population. This is evident in the Census 2006. Aside from the smaller town centre employers such as retailers, school and community uses, job provision is considered poor, but typical of settlements in close proximity to Dublin City.

To reiterate, information on employment and employers is incomplete, however the general situation can be assessed. The town centre is comprised of numerous local businesses which employ small numbers of people, however, collectively should be considered as a major employer. Within the town centre the main employers are Dunboyne Castle Hotel which employs 194 persons and the Primary and Post-Primary education providers which collectively employ 101 staff.

The majority of employers outside the town centre are located to the north of Dunboyne (Appendix F). The main areas of employment are the Dunboyne Industrial Estate, Thorntons Recycling, Bracetown Business Park, the Hub Business Park and the Kilsaran Quarry/Concrete Plant. Alltech Ireland is another key employer and is located approximately 2 km to the west of Dunboyne and is outside the Study Area (Appendix F). Table 5.14 below sets out some of the main employers.

Table 5.14 – Main Employers within Study Area			
Dunboyne Industrial Estate		Bracetown Industrial Estate	
Employer	Total Employed	Employer	Total Employed
Headway Security Services Ltd	100	Carton Bros Ltd	478
Adhesive Tape & Die Cutters	45	Nalco Ltd	25
Pickerings Lifts Ltd	40	Ecolab Ltd	24
Floor Form Ltd	20		
Rural Area			
Thorntons Recycling	280		
Kilsaran	140		
Alltech	70		
Total	695		527

Alltech and Kilsaran have been operating in the area for relatively long periods. However, the employment types located within Dunboyne Industrial Estate, Bracetown Business Park and the Hub Business Park could be considered to be in a state of flux. This is evident with the closure of older manufacturing and logistics employers and the introduction of more office and industrial office based services developments. It is also evident in the recent planning history for the Study Area in relation to employment uses, (Table 5.15).

Table 5.15 – Notable Employment Planning Applications, Study Area			
Location	Status	No. Units	Reg. Ref. No.
Dunboyne Industrial Estate	Granted	Light Industrial, 4 Units.	DA60170
The Hub Business Park	Recently Completed	Logistics/Warehousing Development	DA50233
Bracetown Business Park	Recently Completed	Office Development	DA70233 & 01/84
Dunboyne Industrial Estate	Recently Completed	Industrial & Industrial Office Building, 13 Units	DA60248
Dunboyne Industrial Estate	Under Construction	Industrial & Industrial Office Building, 31 Units	DA60084

The Table highlights the preference for Industrial/Industrial Office development. This contrasts with the existing uses and building stock in these areas. While it also highlights activity in the area, a number of units remain for sale and lease with some development not being fully completed (DA50233).

While the employment base is evolving, there remains a disparity between the types of jobs based in the study area and the skills set offered by the inhabitants.

Spatial Growth

Roads

A large quantum of land will be required to facilitate the future expansion of settlements within the rail corridor. However, the location of key infrastructure inhibits the spatial growth of these settlements. The M3 Motorway acts to prevent the expansion of both Dunboyne and Clonee to the north, in turn directing them southward. Simultaneously it acts as a barrier or buffer to the integration of land uses north and south of the M3. Similarly, while it will not prevent expansion, the new Distributor Road will be a factor to be carefully considered in the expansion of Dunboyne to the west.

Rail

The rail line has, until recently, inhibited the expansion of Dunboyne to the east. While this should not curtail spatial expansion to a serious degree it will continue to be an issue due to the limited capacity of bridges over the rail line and the costs associated with providing further bridges.

Flooding

The Tolka River flows through Dunboyne from the west, on towards Clonee and then into Fingal County. A considerable portion of the central area of the Study Area comprises the flood plain of the Tolka. While it is a relatively small river, serious flooding of both settlements and the surrounding area has been caused by it. The flood event of November 2002 was considered a 1:100 year event and caused extensive damage in the Study Area. In response to this The River Tolka Flood Study was produced to assess flooding issues and to propose alleviation works along the Tolka from lands immediately west of Dunboyne up to Dublin City Centre. According to RPS MCOS consultants who piloted the project, most of these works have now been completed.

However, it is only possible to minimise the flooding and as such substantial areas around Dunboyne and Clonee will be required as floodplain for the various flood events arising from the Tolka, particularly the 1:100 year event. Figure 5.21 illustrates the predicted future 1:100 year flood event, that is, the expected extent of flooding which would typically occur every 100 years once the proposed flood works are completed. Draft Guidelines on Development in relation to Flood Plains are due to be published by the Department of Environment in September 2008. However, a number of general points in relation to future development and flooding should be noted. The mapping of the future 1:100 flood plain does not cover the entire lands considered by the Study Area, which limits the ability to avoid future flood plains accurately. Also, due to a variety of factors such as global warming and the rate of development within the catchment of the Tolka River, the size of flood events is expected to increase. Due to this, the quantum of land which the flood plains will occupy increases. Due to these factors a conservative approach to flooding is proposed.



Figure 5.21: Aerial Photograph of the Dunboyne & Clonee with the predicted future 1:100 year flood event plain superimposed in blue. Note omission of rail line and M3.

These are important considerations in the future spatial development within the Study Area.

As with the Study Area, the surrounding lands are largely comprised of Greenfield land particularly to the south, west, north and north east. These lands are predominantly comprised of agricultural or associated land uses with a small proportion of lands in residential uses, in similar proportion to those above. The Landscape Character Assessment in the County Development Plan categorises lands outside the study area to the west, north and north east as 'Agricultural Land and Natural Grassland'. Lands to the south west are categorised as 'Dunboyne Farmland' with lands to the north west, north and north east outside the study area as 'Ashbourne – Dunboyne Farmland'.

The Study Area also shares a short stretch of border (200m) with Kildare County Council at the extreme south of the study area. Lands at this point are also predominantly agricultural with little notable development.

The Study Area shares a border with Fingal County Council of approximately 6km. The lands adjacent to the south east comprise settled outer-suburban residential land uses and are approximately 1km from the study area. They are relatively settled and as such there has been little further development there in recent years (2003 to 2008). These uses are located to the south east between the M3 Motorway and the railway line. These suburbs, known as Littlepace and Castaheany, are orientated towards Mulhuddart and Clonsilla. They are in stark contrast to the rural and predominantly agricultural land uses a short distance away in County Meath. The clear distinction between the land uses of these areas and the Study Area reflects the boundary between the administrative areas of Meath County Council and Fingal County Council. It should be noted that a pocket of Greenbelt lands sits between Clonee and these lands. The most notable large scale development within this area is the Hansfield SDZ, referred to in the policy section. This proposal will see the development of c. 3,000 residential units and associated services. Little construction work has begun to date.

Lands immediately south east of the Study Area, within Fingal County Council and north of the N3 are predominantly light industrial and technology/office park nature. There has been consistent expansion of the light industrial, technology and office lands north of the N3 and south of the N2, here referred to as Damastown. This type of land use began to expand in this location, immediately east of the Meath County Council border in the early 1990's and has been expanding to the east and north since.

Planning Policy Appraisal

The area within Meath County Council's jurisdiction is designated as a 'Rural Area Under Strong Urban Influence'. This designation reflects the fact that while much of the area is rural it exhibits characteristics associated with its proximity to the immediate environs or commuting catchment of Dublin and other urban areas in Meath and North Kildare. In strategic terms, the area, while rural in terms of land use is within the commuter-belt and peri-urban areas of County Meath. This means that rural lands uses (agriculture, horticulture, equine and other land uses typically associated with the economic and social function of rural areas) are under considerable pressure to change to land uses associated with the economic and social function of commuter-belt, peri-urban and suburban areas such as housing and light industrial, transport and industrial office land uses. Particularly pressure arises from the demand for one-off rural housing.

The 'Rural Area Under Strong Urban Influence' designation, in conjunction with the zoning policy in urban areas, seeks to retain suitable land uses and functions of the rural parts of the Study Area and to channel the pressure for development and particular non-rural land uses into existing settlements (urban areas).

In relation to lands to the south east adjacent the study area and within the administrative area of Fingal County Council, lands south of the N3 are predominantly zoned for residential purposes and form the fringe of the larger suburban settlement of Blanchardstown. The lands to the north are predominantly zoned for science and technology based employment, housing light industrial and technology related land uses. This zoning is reflected by 89 Ha. of land being zoned to light industrial uses across the boundary in the Study Area.

Overall Land Use Findings

Population

The Meath CDP population forecast outstrips Census population figures and those set out in the NSS and RPDGDA and the historic patterns contained in the Census figures. Development levels have diverged from what was anticipated in these documents, which undermines the relevance of using them to frame the study. This divergence needs to be addressed to provide accurate guidance to the direction of the study.

Furthermore, demographic analysis highlights that the resident population of the Study Area is predominantly based on the 2-parent family with children and is relatively young. The data also highlights strong locational differences in growth levels within Meath and also between Dunboyne and Clonee.

Effects of proximity to Dublin Metropolitan Area

The applicable land use policies in the Study Area have been resisting and channelling the intense development pressure emanating from the Dublin Metropolitan Area, evident in the divergent land use patterns between Fingal and Meath. However, this must now be balanced against the need to manage development pressure resulting from the rail line and M3. The land use pattern in the Study Area is changing as seen in the recent light industrial and industrial office zoning to the north of Clonee and the suburban nature of residential development in Clonee and Dunboyne. As such the precise strategic role and character of the Study Area in this context needs to be ascertained.

The contrast between land uses in Meath and neighbouring Fingal clearly highlights the impact of the administrative boundary and alternative planning policies between the jurisdictions of Meath and Fingal County Councils and the artificial dichotomy of contrasting land uses created by it. This is a key issue to be dealt with and will be expressed through the future role of Clonee Village.

Land Use & Transportation

It is evident that within and adjacent to the Study Area, land use has followed road infrastructure where land use is now largely disjointed from the rail network with the exception of Dunboyne. The reorientation of land use must be achieved while maintaining town and village centre vitality and viability, increased densities and sustainable development.

School provision

The school provision in Dunboyne serves the entire Dunboyne DED. Of the 1 post primary school and 4 primary schools in Dunboyne, all are at or near capacity. The Department of Education & Science has plans in place to cater for demand until 2013 on the existing school sites. However, the Department has no plans to accommodate demand for school places beyond this date. While Meath County Council has zoned additional community lands which have the capacity to cater for growth in educational facilities well beyond 2013, a balance must be sought in accommodating the range of community uses required to serve the town which may need to locate on these lands.

A key point emerging from analysis of school provision is the impact on traffic patterns in Dunboyne. Dunboyne Junior National School, Dunboyne Senior National School and St. Peters College are in close proximity and together act to increase congestion on the R156. St. Peters National School is planned to relocate as it reaches capacity. In turn, Gaelscoil Dhun Buinne has recently relocated, and a permanent school will be built on its current site at Rooske Road. As the other existing sites reach capacity there may be a need to relocate some provision.

To ascertain the best future arrangement further information from the Department of Education in conjunction with the individual schools in Dunboyne is required.

Residential Development

The management of demand for residential development for commuters has seen the spread of suburban development around Dunboyne and Clonee and an increase in single rural houses

and ribbon development in the Study Area. It is evident that there is a poor mix of uses in Dunboyne which has only began to change recently. Clonee offers a better mix, however is structurally weak with much of the residential development disjointed from the Village centre. This is directly related to traffic congestion in urban areas. Curtailing rural housing whose economic or social connection to the rural area is minimal, increasing urban densities and decreasing proximity to public transport services will improve the viability of rail infrastructure, decrease congestion and improve the vitality and viability of urban areas.

Flooding

The Tolka River flood plain remains a key factor in the spatial organisation of the settlements in the Study Area; its current impact on land use needs to be assessed in greater detail in the context of the River Tolka Flood Study Report 2003 with particular reference to the relationship of Dunboyne and Clonee. The Departmental Guidelines relating to Development in Floodplains is due for publication September 2008.

Social & Community Facilities

Regarding Social and Community Facilities, Dunboyne and Clonee provide an adequate range of services for the catchment population; however, strong growth in services will be required as the population grows toward the Horizon Year. The quantum of lands zoned for Community uses will largely be taken up by the provision of educational facilities, below. As such, more Community lands will be required to accommodate the expected growth.

Retail Facilities

In contrast, retail facilities are poor, particularly for Dunboyne. The quantum of convenience and comparison floorspace is relatively small; however, this is typical of a settlement in close proximity to centres such as Blanchardstown and Dublin City. While growth is needed to meet existing demand, a considerable level of expansion is needed to cater for the expected growth in population and Draft Retail Planning Strategy for the Greater Dublin Area.

The expansion of retail facilities and town centre uses generally in Dunboyne will be difficult due to the lack of adequate sites to accommodate the required quantum of floorspace needed and the proximity to large, low density suburban style settlements to the town centre. This is a critical issue for the future viability and vitality of Dunboyne.

Employment

As the employment base of the Study Area is low and recent population growth has been particularly high, considerable growth in job provision is required to increase the ratio of jobs to population to a self-sustaining level. The appropriate quantity and location of lands is critical to this. In addition, the changing profile of the type of employers locating in the Study Area and the economic function of the Study Area between the present and the horizon year are important factors to be dealt with by the IFPLUT.

Dunboyne

The development of Dunboyne has been spatially imbalanced largely due to the impact of the railway corridor and the Tolka River flood plain. The reopening of the train station at Dunboyne and the design of the IAAP lands will re-orientate the layout of the town to the east. However, the new M3 and the unproven flood relief works prevent a more spatially balanced reorientation of the town to the east around the train station. How the future expansion of the town centre will relate to the train station will also have to be carefully considered.

The footprint of Dunboyne is broad with the land take of its residential element particularly high due to the low density. The pressure for residential, commuter based development in Dunboyne must be dealt with correctly to prevent urban sprawl and the associated car dependency. This is being redressed by the increased density from 35 units per hectare currently used in the town to 50 units per hectare proposed for the IAAP lands. However, a strategy in the context of the flood plain and M3 motorway must be devised.

Clonee

Clonee suffers from a weak village core, where the Tolka flood plain, the M3 motorway and the proximity of the boundary with Fingal is forcing residential development away from the village core. Alongside these issues its relationship to the outer-suburban development 500m to the east in Fingal must be clarified. The role and treatment of Clonee in this context, with special reference to Dunboyne and the promotion of sustainable urban centres must be decided.

The relationship to and impact of the light industrial and industrial office lands on Clonee is related to the juxtaposition of land use patterns in Fingal and Meath and needs to be ascertained.

Pace

Pace is a rural area traversed by a busy national route: this situation is to be compounded with the introduction of the rail line, M3 Motorway and the Park & Ride facility. This will bring new pressure for development which may conflict with the rural surroundings and planned infrastructure. The future role of this area will be a key consideration of the Study.

Rural Area

As highlighted above, the population of the rural area is comparable to that of Clonee Village. The level of single rural houses and ribbon development along the local road network is also evident. The County Development Plan employs appropriate policies to protect the rural area in terms of its social and economic fabric. In influencing the growth and development of the main settlements in the Study Area, the IFPLUT will assist in reducing this pressure for inappropriate development of the rural parts of the Study Area

Transportation Issues

6 Transportation Issues

6.1

Introduction

This Chapter describes existing road, traffic and general transportation conditions throughout the study area. This effectively represents a documentation of our understanding of the existing issues and problems and is based on an assessment of existing traffic movement patterns, accessibility, road and public transport infrastructure, points of congestion, and the needs of pedestrians and cyclists. The assessment is based on the observations and measurements made in the base year (2008) and consultation with local residents. The assessment does not at this stage account for future growth in the area. The discussion of issues is presented as follows:

- An overview of the collection of relevant data from existing sources, and by means of specific surveys undertaken in 2008;
- A discussion of the existing road network, the quality, nature and usage of particular links, and how these roads connect with other local and national roads; and a discussion of road traffic issues, including congestion and accessibility;
- An overview of existing public transport issues within the study area and any relevant issues that hamper or inhibit such activity;
- A discussion of pedestrian and cycle provision within the study area.

6.2

Data Collection

6.2.1

Traffic Data Collection

A detailed programme of data collection was necessary in order to ensure that a full understanding of the current traffic situation could be established. The process involved both quantitative and qualitative data collection methods as follows:

- The quality of existing roads through the study area was noted, including their condition, level and type of traffic activity, and any perceived road safety issues which were immediately apparent;
- An audit of pedestrian and cyclists facilities on the principal thoroughfares, centres of population and roads within the study area was undertaken. This will form part of an overall mobility/accessibility audit carried out;
- A large scale series of traffic surveys will be undertaken by a traffic survey specialist at key locations throughout the study area. These will provide the necessary information required to produce a detailed traffic model of the town and will form a base of traffic information which can be used by Meath County Council in the future. These surveys include the following:
 - 12 No. Junction Counts recording detailed hourly traffic movements at junctions over 6-12 hour periods;
 - 4 No. Automatic Traffic Counters (ATC's) recording daily two-way traffic on specific roads for a two week period;
 - 4 No. Registration Plate surveys noting registration plates on the main roads in the Study Area. This will allow information in relation to the origin and destination of traffic to be compiled.
- These surveys allow for a validation of the local area traffic model. It is also useful to supplement the site observations with a robust measurement of the density of traffic movements;
- Journey time surveys will be also conducted through the Dunboyne, Clonee and on other major routes in the study area during the peak hours in order to estimate levels of congestion and the attractiveness of the route compared to possible new road proposals;
- A video recorded drive-through of all roads within the Study Area was carried out to collect additional information on road quality, safety and visibility issues; and

- Existing Traffic Data was also used from external sources. These included:
 - NRA traffic data (www.nra.ie);
 - Appendix H (Roads and Traffic Chapter) of the Dunboyne (M3) Commuter Railway Project EIS – PM Group 2007;
 - M3 Clonee to North of Kells – Arup 2001.

Key issues identified under this data collection process have been highlighted within the following sections.

6.3

The Existing Road Network

The principal road arteries running through the Study Area include the N3 to the north of Clonee and the R156, R157 and R149 Regional Roads which run in east-west and north-south directions respectively.

6.3.1

N3 National Primary Road

The N3 is the primary transport corridor within the study area bypassing both Clonee and Dunboyne village centres and providing connection from Dublin to the North West region. Clonee is effectively surrounded by interchange junctions with the N3. The interchange to the east of the village is a signal controlled junction with the interchange to the west formed by the grade separated roundabout junctions. This type of junction arrangement results in a significant volume of through traffic travelling through Clonee Main Street to access Dunboyne.



Photo 3.1 – N3 National Primary Road

Access to the N3 from Dunboyne is primarily via the R157 Navan Road. The section of N3 adjacent to Clonee is dual carriageway standard but this reduces to single carriageway standard on the approach to the junction with the R157 Navan Road. The reduced carriageway provision causes congestion particularly in the PM peak period when commuter traffic travels from Dublin to areas such as Navan. It is anticipated that the M3 motorway which is currently under construction will relieve this congestion.

6.3.2

R157 Maynooth Road /Navan Road - Dunboyne

The R157 in Dunboyne travels in a north east south westerly direction and provides access to the strategically significant N3 corridor. In the centre of the town the R157 meets the R156 / Main Street at the main traffic signal junction within the town.

The R157 to the south of the R156 is known as Maynooth Road and provides access to Maynooth, the M4 Motorway and Leixlip via Local Roads. The R157 to the north of the R156 is known as the Navan Road and provides access to Navan and Dunshaughlin via the N3, Trim via the N3/R154 and Rathoath via the N3/R155.



Photo 3.2 - R157 Maynooth Road /Navan Road

This road accommodates relatively high traffic flows and an especially high percentage of Heavy Goods Vehicles (HGVs). The volume of HGV traffic may be attributed to commercial traffic travelling from the Maynooth area on the N4, wishing to access the N3 and avoid tolls on the M50.

As with the R156 there are a number of direct/frontage accesses to retail, commercial and residential buildings, resulting in a high turnover of pedestrian, traffic, delivery and parking movements in the town. There are footpaths on both sides of the road with street furniture provided along its length.

6.3.3

R156 Dublin Road/Summer Hill - Dunboyne

The R156 Dublin Road/Summer Hill in Dunboyne provides one of the primary access routes to Dunboyne from Clonee. In the centre of the town the R156 is known as Main Street and it connects with the R157 Maynooth and Navan Roads at the main signal junction in the town. The R156 also connects to the Rooske Road (Local Road) to the east of the town centre which provides access to Lucan via the R149.

The R156 to the west of the R157 is known as Summer Hill Road and provides access to Summer Hill at the R158, Mullagh at the R125 and Trim via the R158.



Photo 3.3 - R156 Dublin Road/Summer Hill

The R156 to the east of the R157 known as the Dublin Road and provides access to Dublin, Clonee, Mulhuddart and Blanchardstown and to Lucan via the R149. There is small section of on-street parking provision on the northern side of the road adjacent to the main signal junction but the majority of on-street parking is located on the one-way sections of road off the R156 (Main Street). Significant on-street parking and a dedicated car park is located adjacent to the Church and the on the northern side and perpendicular parking on the southern side. It is therefore a focal point of vehicular activity in the town. There are footpaths on both sides of the road with street furniture provided along its length.

The R156 currently experiences congestion at various locations as it passes through the Study Area. In particular its junction with the Rooske Road generates delay and queuing as a result of inefficient signal timings. The available carriageway width is reduced as the road passes over the old railway alignment in Dunboyne resulting in reductions in vehicular speeds. This issue is compounded by the vertical road alignment also reducing visibility at this location.

6.3.4

R156 Dublin Road - Clonee

The principal road artery running through Clonee village is the R156 which runs in an east-west direction. This section of the R156 accommodates significant volumes of traffic through Clonee Village and also a significant amount of on-street parking.

The R156 in Clonee caters for multiple access points to retail, residential, service stations and parking areas whilst also facilitating major through traffic as detailed above.



Photo 3.4 - R156 Dublin Road in Clonee

It therefore caters for high traffic volumes throughout the day and in particular at peak times where significant queuing occurs on the road due to lack of capacity and general road space at major junctions within the town. In particular, the junction between the R149 and the R156 to the west of the village causes significant queuing and delay at peak times with significant queuing forming on the R156 due to right turning vehicles to the R149. There are footpaths on both sides of the road the quality of which varies along the length of the village from high to poor standard.

6.3.5

R149 Lucan Road (Regional Road)

The R149 connects to the R156 to the south of Clonee Village runs in a north-south direction through the study area. It provides access to Lucan, Leixlip and the N4 and also an alternative access to Dunboyne from the south via the Rooske Road.

This road is rural in nature but accommodates relatively high traffic flows. The junction between the R149 and the R156 to the west of Clonee village experiences significant queuing and delay at peak times with significant queuing forming on the R156 due to right turning vehicles to the R149.



Photo 3.5 - R149 Lucan Road (Regional Road)

6.3.6

Other Roads in the Study Area

The Rooske Road (Local Road) runs in a north south direction and connects with the R156 Dublin Road in Dunboyne to the east of the town centre adjacent to the existing secondary school. The Rooske Road provides alternative access to Dunboyne to/from the south via the R149 which also runs in a north-south direction and provides access to Lucan, Leixlip and the N4.

The junction between the Rooske Road and R156 has been recently signalised. The signal junction however produces severe bottle necks and queuing due to both the volumes of traffic at peak times and also the non provision of a dedicated, adequately sized right turn lanes from the R156 to the Rooske Road. Vehicles wishing to turn right from the R156 to the Rooske Road block vehicles wishing to progress straight on the R156.

St Patrick's Park Road, Mill Farm Residential Road, Dunboyne Castle Residential Road all primarily provide access to residential developments. However all these roads also currently provide a secondary function as a short cut route for traffic wishing to avoid the traffic signalled controlled junction on the main street. These routes are identified in Figure Number 5 contained in the Appendix to this paper.

6.4

Existing Modal Split in the Study Area

The POWCAR dataset was analysed to ascertain the existing modal split of people living or working in the study area. Table 6.1 below outlines the mode of transport used by people travelling to Dunboyne.

Table 6.1 – Destination Dunboyne – All trips

Means of transport	On foot	Bicycle	Bus, minibus or coach	Train, DART or LUAS	Motor cycle or scooter	Driving a car	Passenger in a car	Lorry or van	Other means	Work mainly at or from home	N/A
% Use	11%	1%	4%	0.3%	0.7%	70%	5%	6%	0%	1.1%	1%

The table above highlights the reliance on vehicle based trips in the Dunboyne area. Table 6.2 outlines the mode of transport used by people originating in Dunboyne.

Table 6.2 – Origin Dunboyne – All trips

Means of transport	On foot	Bicycle	Bus,minibus or coach	Train, DART or LUAS	Motor cycle or scooter	Driving a car	Passenger in a car	Lorry or van	Other means	Work mainly at or from home	N/A
% Use	5%	1%	8%	2%	1%	69%	4%	6%	0%	3%	1%

The table above also shows the reliance on vehicles for trips from the Dunboyne area. Tables 6.3 and 6.4 below outline the mode of transport for work trips to/from Dunboyne. The modal splits are broadly similar to 6.1 and 6.2 above.

Table 6.3 – Destination Dunboyne – Work Trips Only

Means of transport	On foot	Bicycle	Bus,minibus or coach	Train, DART or LUAS	Motor cycle or scooter	Driving a car	Passenger in a car	Lorry or van	Other means	Work mainly at or from home	N/A
% Use	10%	1%	3%	0%	1%	72%	4%	7%	0%	1%	1%

Table 6.4 – Origin Dunboyne – Work Trips Only

Means of transport	On foot	Bicycle	Bus,minibus or coach	Train, DART or LUAS	Motor cycle or scooter	Driving a car	Passenger in a car	Lorry or van	Other means	Work mainly at or from home	N/A
% Use	5%	1%	7%	2%	1%	70%	4%	6%	0%	3%	1%

Overall the POWCAR information on mode of transport highlights the dependence on vehicles as a mode of transport in the Dunboyne area.

6.5

Existing Road Traffic Issues

6.5.1

Major Problems/Issues

A number of the major issues have been identified arising from both site observations and the data collection process. These range from broad general issues covering differing sections of the study area to detailed issues at specific locations. A summary of the principal traffic issues observed along the key routes in the study area are as follows:

ROAD NETWORK & TRAFFIC ISSUES

General Problems (Dunboyne & Clonee)

1. A high volumes of HGV traffic currently routes through Dunboyne town particularly along the R157 and R156. This results in a large number of HGV manoeuvres being undertaken at the main signalised junction in Dunboyne town creating difficulties for pedestrian and cyclist movement.
2. Clonee caters for significant volumes of 'through traffic' in addition to a high percentage of HGV's. Congestion and queue formation occurs at peak times during the day in both the village centre and the junctions between the R156/R149, R156/Off-ramp from N3 and R156/On-ramp to N3;
3. Significant congestion and delay is experienced along the R156 in Dunboyne at its junction with the Rooske Road, and the R157 in the centre of Dunboyne.
4. High traffic speeds were observed on the approach to Dunboyne from all roads throughout the day, despite the presence of numerous pedestrians, parking vehicles and the 50kph speed limit. This increases the dangers to pedestrians and vehicles exiting from on-street parking spaces and residential estates.

Detailed Problems (Dunboyne)

1. The design of the main signal junction does not permit the smooth flow of traffic due to geometric restrictions (tight turns, etc). This is especially the case for large vehicles which sometimes need to utilise the opposing carriageway to complete their turn;
2. The signal junction between the Rooske Road and R156 produces severe bottle necks and queuing due to both the volumes of traffic at peak times and also the non provision of a dedicated, adequately sized right turn lanes from the R156 to the Rooske Road. Vehicles wishing to turn right from the R156 to the Rooske Road block vehicles wishing to progress straight on the R156;
3. The existing on-street parking area in the one way system to the south of the R156 adjacent to the main signal junction is continuously at capacity resulting in opportunistic illegal double parking by both cars and delivery vehicles which cause significant queuing and delay on this one-way system;
4. This area is signed for access by delivery vehicles only but it was observed that numerous vehicles use it as a through route;
5. A designated and enforced area for Loading or Deliveries is not provided on in the Town Centre;
6. Right turners wishing to access the one-way system adjacent to the Church cause significant blocking and queuing due to the lack of right turn lane and heavy traffic volumes;
7. The existing parallel parking on road sides restricts the operational width of the road at a number of locations effectively reducing the road to one lane and forcing vehicles to brake suddenly with this loss of carriageway width.
8. The junction between the R156 Navan Road and the N3 is sub-standard in terms of design, safety and operation.
9. A section of the R156 Navan Road to the north of Dunboyne is severely restricted in terms of width and visibility due to the presence of a bridge and poor horizontal and vertical alignment resulting in the requirement of signals.

TRAFFIC ISSUES

Detailed Problems (Clonee)

1. The existing junction between the R156 Dublin road and the on-ramp to the N3 to the west of Clonee Village is a road safety concern on the grounds of visibility, signage, geometric layout and vehicles operating speeds;
2. The condition of the carriageway in Clonee Village is in poor condition at a number of locations;
3. The junction between the R156 Dublin Road and R149 Lucan Road causes significant delay and produces significant queuing during peak times as firstly the junction caters for large volumes of traffic and secondly there is no right turn lane provided from the R156 to the R149; and
4. Improper and illegal on-street parking in Clonee is a serious issue which results in traffic bottlenecks, road safety issues and reduced road capacity. At times vehicles park on footpaths, completely blocking pedestrians who are then forced to walk on the live carriageway.

6.6

Public Transport Issues

6.6.1

Existing Public Transport Provision

Public transport provision in the Study area is quite limited, with the key services (No.70, 70A, 70X and 270) being Dublin Bus services to and from Dublin. Bus Éireann provide provincial bus services that pass through the study area. No frequent, reliable private bus routes were observed in the area. Dublin Bus service routes within the study area are shown as a red line in Figure 3.1 below.



Figure 3.1 – Existing Dublin Bus Routes in Study Area

Dublin Bus

Route 270:

Dublin Bus Route 270 operates between Blanchardstown Shopping Centre and Dunboyne via Clonee Village. The total journey time is approximately 30 minutes. The service frequency offers approximately 1 bus per hour in either direction between 08:55 and 19:25 on weekdays. The frequency increases at the weekend with 16 buses operating in either direction between the hours of 07:30 and 19:30. 18 buses operate to Dunboyne on a Sunday with its first and last buses at 10:00 and 22:35 respectively. 19 buses operate in the opposite direction from Dunboyne with its first and last buses at 09:30 and 23:00 respectively.

Route 70/A:

Dublin Bus Route 70/A operates between Hawkins Street and Dunboyne via Stoneybatter, Navan Road Garda Station, Ashtown, Blanchardstown and Mulhuddart. The total journey time is approximately 70 minutes. 18 buses operate out of the city centre on weekdays. A single 70B service operates via Blanchardstown Village and Littlepace, not serving the 70 bus stop at Blanchardstown Shopping Centre. 21 buses operate from Dunboyne with services running between 06:30 to 22:20, 4 of which are 70A and therefore operate via Littlepace and the N3. 10 buses operate in either direction on Saturdays between 06:45 and 23:20. Sunday services entail 9 buses operating from the city centre between 10:10 and 23:25, and 8 buses operating from Dunboyne between 11:05 and 22:35.

Route 70N:

Dublin Bus Route 70N is a Nitelink bus service that operates between Westmoreland Street and Dunboyne. Buses operate from the city centre at 00:30 and 02:00 on Monday to Thursday, and at 00:30, 02:00, and 03:30 on Fridays and Saturdays. There is no service on Sundays. The outbound pick-up points are Prussia Street (Hanlon's Corner), Ashtown Roundabout, Castleknock Village (Church of Ireland).

Route 70X:

Dublin Bus Route 70X is an express bus service that operates between Belfield and Dunboyne, Monday to Friday only. The total journey time is approximately 90 minutes. 2 buses operate from Dunboyne during the AM peak hour (07:00-08:00) and 2 buses operate from Belfield in the evening.

Bus Éireann

Route 118:

The Bus Éireann Route 118 operates between Dublin and Killucan/Mullingar Rail Station/Longford (Rail Station). 11 buses operate via Dunboyne.

Route 109:

The Bus Éireann Route 109 operates between Kells and Dublin via Navan, Dunshaughlin, and Dunboyne. 1 bus operates each day Monday to Saturday.

Table 6.1 - Bus Frequency

Bus Route	270	70X	70/A	118	109
No. of services during peak hours	2	1	4	1	1

The above table highlights that there are 9 buses servicing Dunboyne in the AM and PM peak hours.

Irish Rail

There are proposals to construct a twin track railway line from the planned M3 Interchange at Pace through to Clonsilla Station linking into the city centre at the new Docklands Station. Stations are proposed at Pace and Dunboyne with a third station at Hansfield, south of Dunboyne. It is expected the rail line to Pace will be completed by 2010 with a further extension

to Navan expected by 2015. Services on the line will increase to a 15 minute peak service and a 30 minute off peak service when required by demand levels.

It is anticipated the number of services on the line will be similar to those currently servicing Clonsilla. Currently on the existing Clonsilla to Maynooth railway line there are 58 train movements everyday starting at 6am and finishing at 12pm during weekdays with train frequencies, ranging from an hourly to half hourly service during the day increasing to every 15 minutes at peak times. There are also an additional 30 train movements per day between Clonsilla and the newly opened station at Docklands. There are 20 train movements on Sundays, between 9am & 11pm. Through implementation of the Dunboyne (M3) Commuter Rail Project 44 trains, increasing to 88 trains over subsequent years, will run from Clonsilla Station to Pace leading to a peak time frequency of a one train every 15mins.

Total annual passenger demands are predicted from rail feasibility studies to be in the region of 2 million passenger trips by 2016.

According to the Irish Rail Railway Order Document the Pace Park and Ride site will contain 1200 spaces and will be accessed from Dunboyne Bypass North approx 300m to the west of the Pace Interchange. It is anticipated 70% of the passengers using the station with park vehicles at the station with the remaining 30% arriving by car set down, bus, taxi, cycle etc. Parking will also be provided at the Dunboyne Station with approx 420 spaces proposed to the east of the rail line. It is anticipated that because of the stations location near Dunboyne town centre only 40% of passengers will park vehicles at the station with the remaining 60% of passengers walking, cycling, car set down, bus, taxi etc.

The Dunboyne Rail Line will also connect to the proposed Metro West at the Porterstown Station. This will provide a frequent, reliable service to the city centre and the airport.

Public Transport

General Problems

1. Limited or no non-radial non-Dublin focussed public transport from Dunboyne or Clonee to other centres such as Rathoath, Dunshaughlin, Maynooth, Clonsilla, Ongar, or existing employment generating locations. E.g. Bracetown.
2. Lack of bus priority measures and traffic congestion through the study area creates uncertainty in relation to public transport journey times. Public transport journey times are generally considered to be slower than private vehicle in the study area.
3. Pedestrian activity generally required at the beginning or end of public transport trips is currently poorly provided for outside the urban centres of Dunboyne and Clonee.
4. Poor information supply including promoting and marketing of bus services with limited information available at bus stops/shelters in relation to timetables, real time journey information, routes and fares.
5. The demand for local internal public transport trips within the study area is also currently poorly catered for.
6. No railway service currently exists in the area.

Detailed Problems

1. HGV traffic routing via inappropriate links such as Dunboyne Main Street creates congestion and reduces the efficiency of bus services. The large volume of HGV movements also creates difficulty for pedestrian movements associated with public transport journeys.
2. Several bus stops in the area do not provide shelter to passengers resulting in exposure to inclement weather conditions.

6.7

Provision for Pedestrian and Cyclist Movement

6.7.1

Existing Pedestrian Provision

In general, pedestrian provision in both Dunboyne and Clonee is relatively good with high quality facilities at a number of locations. However, outside Dunboyne and Clonee in the rural parts of the Study area the provision of pedestrian facilities is poor. However, as continued development takes place on the outskirts of towns and villages, appropriate infrastructure and facilities should be provided and forms direct high quality, safe connections with the town and village centres. In summary, the current infrastructure provision deteriorates as one move away from the central areas.

Good quality features of the local pedestrian environment include the provision of pedestrian crossings on the main signal junction (R156/R157) and the new signal (R156/Roske Road) in Dunboyne, a standalone signalised pedestrian crossing mid-way in Clonee Village and sporadic measures such as dropped kerbs and raised informal pedestrian crossings throughout the study area.

The standalone signalised pedestrian crossing mid-way in Clonee Village appeared to not be in operation but here was evidence that new poles were being installed. It should be noted however, that there are no dropped kerbs or tactile paving provide at this existing crossing point and on-street parking was permitted close to the crossing.

The key shortfall in pedestrian provision relates to the inconsistent provision of quality infrastructure and adequate crossing facilities throughout the study area. Key pedestrian desire lines providing direct access are only catered for in specific location with these and other existing routes also hindered by existing on-street parking (including illegal parking on footpaths), poor footpath surfaces, wide high speed roads and the inadequate provision of facilities for the mobility impaired. These include facilities such as tactile paving, dropped kerbs, colour contrasting and location of street furniture.

Footway provision and facilities in a number of locations in the study area are unsatisfactory and could lead to difficulties for able bodied pedestrians and therefore have serious issues for the mobility and visually impaired.

The indicative locations of the issues identified above for the Study Area including Dunboyne Town and Clonee Village are shown in Figures 4.0, 5.0 and 6.0 respectively in Appendix A.

6.7.2

Existing Cycle Provision

No provision for cycle facilities is currently made in the study area. Cyclists currently experience competition for road space with other road users. Currently private vehicles and particularly Heavy Goods Vehicles dominant available road space within the study area. A low volume of cycling activity was noted in Dunboyne and Clonee during site visits. This may be a function of the infrastructure provided for such activity among other issues for example land use.

Pedestrian Facilities

General Problems

1. Inconsistent provision of quality infrastructure and adequate crossing facilities is evident in Dunboyne and particularly Clonee village;
2. Reasonably high volumes of pedestrian activity not catered for along desire lines and observed crossing points;
3. No pedestrian facilities (including basic footpaths) provided at numerous locations;
4. Restricted footpath width provided due to unloading of service vehicles and short term parking;
5. Lack of consistent pedestrian and mobility impaired infrastructure and facilities such as dropped kerbs and tactile paving throughout the Study Area.

Detailed Problems

1. The illegal parking of vehicles across/on footpaths was observed in numerous locations which then forced pedestrians including the elderly and mobility impaired to walk on the live carriageway;
2. Lack of any pedestrian facilities on a section of the R156 from Dunboyne to Clonee near the bridge. This prevents any pedestrian access past this point due to the restricted road width, presence of safety barrier, high traffic speeds and limited visibility;
3. With the high volumes and speeds of large HGV's and other vehicles on the approach roads to both Dunboyne and Clonee, the lack of verges between the footpath and carriageway is noticeable. Large vehicles passing a pedestrian or worse a cyclist on these roads are forced to deal with a suction effect off these passing vehicles and where the carriageway width is low this effect is worsened by the proximity of vehicles;
4. The positioning of street furniture, street lights and signage throughout the study area is an issue in terms of safe access for the mobility impaired and also the provision of adequate footpath widths for general use.

Cyclist Facilities

General Problems

1. Dedicated cyclist road space in the form of cycle lanes are not provided within the study area. This leads to cyclist competing with other roads users for road space.
2. Limited/No cycle facilities to/from schools in the area.
3. Off road cycle routes which can encourage cycling activity are also not provided.
4. The volume of Heavy Goods Vehicles travelling through the study area creates difficult conditions for cyclist. Safety issues are also prevalent as HGV's manoeuvres at junctions can be hazardous to cyclists.
5. Extremely limited official cycle parking spaces exists within the study area.

Summary Transportation Issues

Road Network & Traffic Issues

1. A high volumes of HGV traffic currently routes through Dunboyne town particularly along the R157 and R156. This results in a large number of HGV manoeuvres being undertaken at the main signalised junction in Dunboyne town creating difficulties for pedestrian and cyclist movement.
2. Significant congestion and delay is experienced along the R156 in Dunboyne at its junction with the Rooske Road, and the R157 in the centre of Dunboyne.
3. Clonee caters for significant volumes of 'through traffic' in addition to a high percentage of HGV's. Congestion and queue formation occurs at peak times during the day in both the village centre and the junctions between the R156/R149, R156/Off-ramp from N3 and R156/On-ramp to N3.

Public Transport Issues

1. Car ownership levels are such that private vehicular travel is the dominant mode of transport satisfying the demand for travel in the area. This presents a challenge to the introduction of improved public transport service levels within the study area;
2. Limited or no public transport connectivity from Dunboyne or Clonee to other centres such as Rathoath, Dunshaughlin, Maynooth, Clonsilla, Ongar, or existing employment generating locations. E.g. Bracetown.
3. Lack of bus priority measures and traffic congestion through the study area creates uncertainty in relation to public transport journey times. Public transport journey times are generally considered to be slower than private vehicle in the study area.

Pedestrian Issues

1. Inconsistent provision of quality infrastructure and adequate crossing facilities is evident in Dunboyne and particularly Clonee village;
2. Reasonably high volumes of pedestrian activity not catered for along desire lines and observed crossing points;
3. No pedestrian facilities (including basic footpaths) provided at numerous locations;
4. Restricted footpath width provided due to unloading of service vehicles and short term parking.

Cycling Issues

1. Dedicated cyclist road space in the form of cycle lanes are not provided within the study area. This leads to cyclist competing with other roads users for road space.
2. Off road cycle routes which can encourage cycling activity are also not provided.
3. The volume of Heavy Goods Vehicles travelling through the study area creates difficult conditions for cyclist. Safety issues are also prevalent as HGV's manoeuvres at junctions can be hazardous to cyclists.
4. Extremely limited official cycle parking spaces exists within the study area.

Conclusions

Existing pedestrian facilities will need to be assessed as part of this study. Planning department to ensure pedestrian facilities are provided as part of future developments.

Existing cycle facilities to be assessed and new facilities provided where possible to ensure the safety of cyclists in the study area.

Methods of reducing HGV traffic through Dunboyne centre to be assessed including the provision of additional road infrastructure.

Public transport routes to be assessed and identified to improve public transport service in the area and reduce reliance on cars.

Conclusions

7 Conclusions

7.1 General

As described in this report, a thorough baseline data collection process has been carried out to identify the needs of this study. This has included examining historical and existing traffic data, Land Use and Planning data collections carrying out on-site data collection and consulting with both the general public and key stakeholders. The key findings are summarised below.

7.2 Findings

The overall Transportation and Land Use findings of this stage of the study can be summarised as follows:

- Congestion, queuing and delay issues for vehicles at key junctions throughout the study area during peak traffic periods;
- Lack of consistent pedestrian and mobility impaired infrastructure and facilities such as dropped kerbs and tactile paving on key pedestrian desire lines throughout the Study Area;
- Fundamental accessibility issues relating to the observed illegal parking of vehicles across/on footpaths at numerous locations forcing pedestrians including the elderly and mobility impaired to walk on the live carriageway;
- On-Street Parking issues are evident in both Dunboyne and Clonee centres;
- Existing infrastructure and facilities is sub standard in a number of key areas for vulnerable road users such as pedestrian and cyclists ;
- There is a heavy reliance on private car use within the Study area due to land use, planning, public transport provision, accessibility and commuter driven traffic;
- Traffic speeds on a number of approach roads to both Dunboyne and Clonee is excessive and there is a need for traffic calming measures;
- There was also a high volumes and speeds of HGV's and other vehicles were observed on roads within the study area which raises a number of road safety issues;
- There is a requirement to protect the study area from future increases in traffic,

Next Steps

8 Next Steps

8.1

The Next Steps

Having examined the data gathered to date, a clear picture of the existing and potential future issues has been established. This will form the basis for the next phase of this study which will involve the development of strategies to address these issues. Following publication of this Issues Paper, the Study Team will progress with the development of the traffic model, individual initiatives and measures to form an overall strategy. The principle objective of the study is to produce multiple strategies which will complement and integrate with each other in the overall goal of effective and sustainable Land Use and Transportation Management within the Study Area. These strategies include:

- The Land Use and Planning Strategy
- The Accessibility Strategy incl. Pedestrians, Cyclists and Mobility Impaired;
- The Public Transport Strategy;
- The Traffic Management Strategy;
- The Roads Strategy;
- The Parking Management Strategy; and
- The Delivery Management Strategy;

The final package of initiatives will be prepared in discussion with Meath County Council and further public and stakeholder consultation is envisaged on more defined measures, proposals and strategies at an appropriate time.

Appendix A - Figures

Appendix B – Stakeholder Consultation Letter Example

Appendix C - Public Consultation Advertisement

Appendix D – Written Submissions and Map

No.	Written Submissions
01	Serena O'Halloran & Dolores Staunton
02	Maire Healy
03	Eamonn O'Hare on behalf of Hilltown Partnership Ballymore
04	Sean Boylan
05	Denis Coakley on behalf of Bracetown Business Park Clonee
06	Martin Craig for Peter Moran, Chair. On behalf of St. Peters GAA Dunboyne
07	Stephen Little & Assoc. on behalf of Frank Doolin, Eugene Murray & Philip Earle re. lands at Dunboyne
08	Shauna Walsh, RPS Group, on behalf of Kildangan Stud Unlimited
09	Andrew Deacon, John Spain & Assoc., on behalf of Mark Elliott & Matt Brady, Clonee.
10	Conor Dalton on behalf of Barina Construction
11	Aine Burke, GVA Planning on behalf of Tesco Ireland
12	Michael McLoughlin, Dunboyne Labour Party.
13	Declan Brassil & Co Ltd on behalf of Neil Lord, Pat Gregan & Ken Mallone.
14	Declan Brassil & Co Ltd on behalf of McGarrell Reilly Homes Ltd re. lands at Bennettstown & Pace.
15	John Spain & Associates on behalf of Greencore Developments Ltd
16	ILTP Consulting on behalf of Laurence & Marion Kelly
17	ILTP Consulting on behalf of Frances Kelly & Mary Jackson
18	Declan Brassil & Associates on behalf of Patrick & Joanna McNerney
19	Donal & Cheri O Mathuna
20	Declan Brassil & Co Ltd on behalf of Patrick & Joanna McNerney
21	Declan Brassil & Co Ltd on behalf of Terence McGovern & Patrick Kelly
22	Declan Brassil & Co Ltd on behalf of Herby Jordan
23	Simon Clear & Associates on behalf of Eamonn Walsh
24	Edward McWilliams
25	Ryan Walsh Associates on behalf of Renar Ltd
26	Declan Brassil & Co Ltd on behalf of Matt Brady, Mark Elliott, Norman & Alan Prendergast
27	Paul Carroll & Associates on behalf of Paddy Molloy
28	Douglas Hyde & Associates on behalf of The Royal Gateway Holdings Ltd.
29	Jim Rogan on behalf of Padraig Tierney
30	John Spain & Associates on behalf of Bennett Developments

	Ltd & Kilsaran Group
31	Philip Doyle
32	Tom Phillips & Associates on behalf of SIAC Construction
33	Coady Partnership on behalf of Monsignor Dermot Farrell St Finian's Diocesan Trust
34	Ellen Gavanic
35	Denis Coakley
36	Teresa Dunne
37	Gerry Mulvey
38	Maureen O' Rourke
39	John Doherty
40	Tadhg O Halloran
41	John Cagney
42	John Doherty
43	Eamonn & Joan Kelly
44	Schira Dineen

Appendix E – Land Use Map of Dunboyne and Clonee

Appendix F – Distribution of residential units within the Study Area