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WICKLOW AT THE MILLENNIUM – A spatial analysis of development patterns

Prepared for

WICKLOW COUNTY DEVELOPMENT BOARD

 $\mathbf{B}\mathbf{y}$

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We hope that the report will be of assistance to all organisations and individuals with an interest in the future development of county Wicklow.

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1. INTRODUCTION

The purpose of this report is to provide an assessment of the current situation in County Wicklow in relation to economic, social and cultural development in order to assist the County Development Board in the preparation of its strategy for the next ten years. The content of the report takes account of the Department of the Environment and Local Government Guidelines document, *A Shared Vision for County/City Development Boards*. Comparative data for neighbouring counties are provided where appropriate and detailed mapping has been undertaken to illustrate patterns within the county wherever data are available. Much of the mapping is based on data from the 1996 Census of Population, which is undoubtedly a limitation. However, there are no more recent data available at sub-county level for most indicators. Where appropriate, county level data for more recent years have been used; otherwise comments have been inserted on the most likely direction of change since 1996.

County Wicklow occupies an area of 2,017 square kilometers with an estimated population of approximately 116,300 in 2001¹. The geographical position of the county is an important contextual factor in any assessment of recent development trends and future prospects. The county is part of the Greater Dublin Area and is, therefore, subject to many of the pressures emanating from the expansion of the capital city.

The typical topography in Wicklow is one of mountains, rolling foothills, forests, coastline, and lakes with attractive views and prospects. The county is dominated by the Wicklow Mountains. With the exception of a narrow coastal strip and some low ground in the south, most of county Wicklow lies above the 200 metre contour line and over one third of the County lies above the 300 metre contour line (*Map 1*).

The spine of the mountain range formed of granite runs in a northeast to southwest direction across the county. The glaciation period in Wicklow contributed significantly to the overall physical appearance of the county with the distinctive glaciated "U" shaped valleys, moraines, corries and glacial lakes, along with other glacial, and peri glacial features and landforms. Among the most distinctive features are the Sally Gap, Powerscourt Waterfall and Glendalough which accommodates the internationally renowned early monastic site. Wicklow also has a 66 km coastline which is renowned for its shingle and sandy beaches.

Wicklow has a number of areas that are particularly important from an environmental perspective. These include Special Areas of Conservation (SACs) and Natural Heritage Areas (NHAs). In order to assist in the planning and management of the countryside Wicklow County Council has identified four distinct landscape zones and for each an assessment of vulnerability is available. More details on environmental management will be provided in Section 6.

Recent patterns of development in the county have been very much influenced by the location of key items of infrastructure and the settlement pattern that has evolved over centuries. In recent times the dominant influence has been the extent of commuting that has

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¹ Wicklow Housing Strategy, 2001 prepared by Wicklow County Council and the Urban District Councils of Arklow, Bray and Wicklow

resulted from the overspill of Dublin. The principal towns are located along the east coast with a second linear arrangement of smaller centres in the west (Map 2). The principal transport routes are the N11 in the east and the N81 in the west. East-west movement is severely restricted by the mountains so that most traffic has to take either the R756 or the R759.

The east of the county is served by the mainline railway with stations at Bray, Greystones, Kilcoole, Wicklow, Rathdrum and Arklow. DART services are provided from Greystones. In addition Bus Eireann has 40 buses operating on a daily basis (Monday to Friday) that serve eight routes.

The provision of supports for different aspects of the economic, social, cultural and environmental dimensions of development is undertaken by a very large number of agencies. While many of these operate either across the entire county or in certain parts of it there are a number of services that are organized on a regional basis. These include supports for enterprise development, tourism, training, health care and security. Unfortunately, the boundaries of the service providers are not always coterminous (Maps 3a, 3b, 4a, 4b, 5a, 5b, 6a, 6b). This administrative situation is not particularly well suited to facilitating the development of a coordinated approach to the delivery of public services.

There are five electoral areas for Wicklow County Council (Bray, Greystones, Wicklow, Arklow and Baltinglass) and three urban council area (Bray, Wicklow, Arklow) – <u>Map 7</u>. In addition Greystones has a Town Commission. An important challenge for the County Development Board is to secure support for a county-wide strategy.

Before proceeding to the more detailed analysis it is useful to establish the relative position of Wicklow in relation to economic development and living standards. Table 1 provides some comparative data for Wicklow and the other counties in the Greater Dublin Area.

The CSO estimate of Gross Value Added (GVA) shows that in 1995 the per capita level of wealth creation as measured by Gross Value Added (GVA) was equal to 80% of the average for the State compared with an index of 111 in Kildare, **Figure 1**. However, the disparities between counties are not as large in relation to per capita disposable income. In 1998 the Wicklow index of per capita disposable income was equivalent to 93% of the State average, **Figure 2**. The trend over the 1990s was for the index to decline slightly.

Another index of the level of household incomes is the percentage of the population covered by medical cards, which was 32.3% in September 2000 compared with an overall figure of 30.6% for all counties. The Wicklow percentage is higher than in the neighbouring counties.

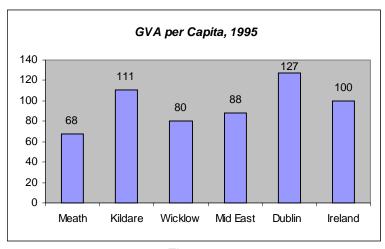


Figure 1

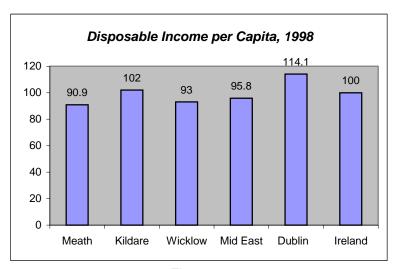


Figure 2

Table 1: Output and Income indices

	GVA per capita 1995	Disposable Income Per capita 1998	Percent of population covered by medical cards, September 2000
Meath	68	90.9	27.8
Kildare	111	102.0	26.4
Wicklow	80	93.0	32.3
Mid East	88	95.8	N/A
Dublin	127	114.1	25.6
Ireland	100	100.0	30.6

The remainder of the report is structured as follows. Recent trends in demography and the labour force will be considered in the next two sections, after which there is a more detailed analysis of the economy. The following section examines the social context for development in Wicklow. Section 6 covers a number of topics under the general heading of Quality of Life.

This is followed by a discussion of the current situation in relation to a number of different forms of supporting infrastructure. Section 8 provides a synthesis which situates the analysis in a wider reference frame that has been prepared for the National Spatial Strategy. Finally, a number of emerging issues are identified and suggestions are provided for a framework that might assist in devising the CDB strategy. The analysis of most topics is accompanied by maps compiled at the level of the 82 District Electoral Divisions (DEDs) shown on <u>Map 8</u>.

2. DEMOGRAPHY

The total county population in 1996 was 102,683 persons, of which 58% resided in urban areas of more than 1,500 inhabitants. It is estimated that the total population had increased to 116,300 by 2001.

2.1 Population Distribution and Change

Density levels vary considerably (Map 9) in a pattern that is largely influenced by the topography and roads network and the settlement structure. The highest densities², more than 40 persons per square kilometre, are found throughout most of the low-lying areas in the east as well as in the corridor from Aughrim to Rathnew. In the west the highest densities are in the districts containing Blessington, Dunlavin and Baltinglass. In the southwest the highest densities are in the district containing Carnew which in 1996 had a population of 1,382. Away from these areas densities decline sharply with most of the central uplands very sparsely settled.

Almost all (97.7%) of the population resided in private households for which the average size in 1996 was 3.22 persons compared with an average of 3.14 for the State. Details on numbers and average sizes of private households in both urban and rural areas are presented in Table 2. While in general the **average household size** for rural areas is larger than in urban areas the pattern across the DEDs is more complex (<u>Map 10</u>). The largest households are mostly in the rural areas in the west. Many of the districts with above average household size have declining populations.

Table 2: Private Households by Aggregate Urban and Aggregate rural districts

Area	No. Househ	of olds	Private	Persons Household	Private	Av. No. of persons per private household
Aggregate town area with pop. Of 1500 or more	18,479			56,683		3.18
Aggregate Rural Area (include towns with population of 1500 or less & rural areas)	12,655			41,636		3.29
Total	31,134			100,319		3.22

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² based on 1996 totals for DEDs

Table 3: Population Number By County, Urban Area and Rural District

District	1991			1996			
	Persons	Males	Females	Persons	Males	Females	% Change in Pop 91 - 96
Wicklow County	97,265	48,076	49,189	102,683	50,823 (49%)	51,860 (51%)	5.3
Arklow Urban District	7,987	3,921	4,066	8,519	4,210 (49.4%)	4,309 (50.6%)	5.8
Bray urban District	25,096	12,074	13,022	25,252	12,133 (48.0%)	13,119 (52.0%)	0.4
Wicklow Urban District	5,847	2,858	2,989	6,416	3,111 (48.5%)	3,305 (51.5%)	9.6
Rathdown No. 2 Rural District	15,093	7,364	7,729	16,395	7,956 (48.5%)	8,439 (51.5%)	8.6
Rathdrum Rural District	24,865	12,435	12,430	26,932	13,585 (50.4%)	13,347 (49.6%)	7.9
Baltinglass No. 1 Rural District	11,967	6,104	5,863	12,749	6,490 (50.9%)	6,259 (49.1%)	6.3
Shillelagh Rural District	6,410	3,320	3,090	6,420	3,338 (52%)	3,082 (48%)	0.0

Source: CSO Censuses of Population 1991 and 1996

Between 1991-96 the total **population increased** by 5.6% (5,418) compared to an increase of 2.8% for the State. The largest increases were in the east extending southwards from Greystones as far as Wicklow and Rathdrum mainly in response to the housing needs of commuters to Dublin (<u>Map 11</u>). Significant gains were also experienced in the northwest especially in Blessington and throughout the surrounding countryside extending into the upland areas. Increases of more than 100 persons were recorded in each of the following districts: Arklow, Kilmacanoge, Blessington, Delgany, Greystones, Glenealy, Kilcoole, Killiskey, Newcastle, and Wicklow. Declines were mainly confined to the southeast (hinterland of Arklow) and the remoter rural districts. Further details on the changes in population between 1991 and 1996 are summarized in Table 3 for each urban and rural district.

Forecasting population growth at county level is extremely hazardous due to the level of uncertainty surrounding some of the key variables. For Wicklow a major influence on population growth is the extent of in-migration associated with commuting to Dublin. This variable is particularly difficult to forecast, as it is dependent on factors such as the supply and cost of housing, competing supply patterns in neighbouring counties, the impact of the Strategic Planning Guidelines for the Greater Dublin Area, etc. Population forecasts produced in 2000 for the Strategic Planning Guidelines for the Greater Dublin Area indicate that by 2006 the county population may have grown to 132,216 and that it may reach 139,016 by 2011. This will represent an increase of 35% over the period 1996-2011.

It is expected that the growth will be unevenly spread throughout the county. Almost 40% of the projected increase is likely to occur in the parts of Wicklow most under pressure from the Metropolitan Area (Bray, Greystones, Enniskerry).

South Wicklow is anticipated to be an ageing sub-region with substantially less primary and secondary school children. The total population is anticipated to fall from 30,000 in 1991 to

24,500 in 2016. The number of primary school-going children is anticipated to fall by half and the secondary school going children by over two-thirds. The workforce is likely to remain at substantially the same level as in 1996 while the retired population may grow slightly³.

2.2 Towns and Villages

The populations of the principal towns and the extent of change since 1986 are summarized in Table 4. Bray and its environs is by far the largest settlement with almost 28,000 persons in 1996. Greystones is the next largest with more than 11,000 (due in large part to housing demand by Dublin based workers) followed by Arklow and Wicklow. Throughout most of the remainder of the county the settlements are small, though some are experiencing rapid growth, eg. Blessington, Kilcoole, Ashford, Kilmacanoge and Newtownmountkennedy.

Table 4: Population of principal towns and changes since 1986, County Wicklow

	Total 1996	Change 1986-91	Change 1991-96	Change 1986-96
Bray + environs	27923	2083	970	3053
Greystones + environs	11296	1273	518	1791
Arklow + environs	8557	-401	570	169
Wicklow + environs	7290	717	1075	1792
Kilcoole	2694	150	209	359
Newtownmountkennedy	2528	138	207	345
Blessington	1860	86	452	538
Rathnew	1437	107	-59	48
Enniskerry	1275	9	37	46
Rathdrum	1234	-132	59	-73
Ashford	1215	96	337	433
Baltinglass	1127	-21	59	38
Kilmacanoge	818	301	55	356
Carnew	795	14	58	72
Newcastle	763	73	130	203
Aughrim	745	-43	32	-11
Dunlavin	693	-14	-27	-41
Tinahely	630	34	2	36
Avoca	490	4	-4	0
Kilpedder	480	25	74	99
Roundwood	446	66	9	75
Glenealy	383	-36	22	-14
Shillelagh	324	-8	-2	-10
Laragh	267	-18	19	1
Donard	162	1	-3	-2

Source: CSO Censuses of Population 1991 and 1996

Wicklow County Development Plan 2001 identifies a three level hierarchy of settlements consisting of 9 primary growth centres, 10 secondary growth centres and 35 villages (Map 12). Indicative populations for 2016 have been computed for each of the main centres. Bray is expected to increase to about 35,000; Greystones/Delgany to 22,000 and Wicklow town and Arklow may each grow to about 12,000 population. The highest levels of relative change

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³ Wicklow County Council Development Plan 2001

(growth rates in excess of 100%) are expected in Rathdrum, Dunlavin, Blessington, Aughrim, Ashford, Newtownmountkennedy and Baltinglass⁴.

Population size is not always a good indicator of the range of services provided by an urban centre, especially in those centres where much of the recent growth is due to the influx of commuters.

Recent analysis of the towns with more than 5,000 population, undertaken by NUI Maynooth and Brady Shipman Martin Consultants for the National Spatial Strategy has revealed considerable deviations between the population and functional ranks of the four largest centres. Bray was the largest population centre in the county in 1996 but its overall functional rank (measured on the basis of indices for 10 classes of functions) was 18. Greystones with a population rank of 27 has functional rank of 56. By contrast, Wicklow town which is ranked 42 in terms of population size has a functional rank of 25 reflecting its status as the county town⁵.

2.3 Migration

Net migration movements are a major influence on population change. In 1996 52% of the population in Wicklow had been born outside the county. The total included 6,310 born in the UK, 847 born elsewhere in Europe, 377 from the USA and 745 who were born in other countries.

Net changes in the size of selected age cohorts over the decade after 1986 are summarized on <u>Maps 13 and 14</u>. They provide acceptable estimates of the extent of net migration, as mortality rates for these groups are particularly low. The cohort aged 10-19 years in 1986 declined in every DED. The largest declines were recorded for DEDs in the south of the county and parts of the northwest including Kilbride and districts south of Blessington.

By contrast, <u>Map 14</u> demonstrates the impact of net in-migration to districts in the east and parts of the northwest especially in the hinterland of Blessington where there were substantial increases in the size of 1986 cohort aged 20-29 years. Significant declines reflecting net-outmigration were mostly confined to the southeast of the county.

2.4 Age Structure and Dependency Ratios

The impacts of such population movements over a long period are reflected in the **age profile** of the population (Figure 3, Tables 5 & 6 and <u>Maps 15</u>, <u>16</u>, <u>17</u>, <u>18</u>, <u>19</u>). The most striking geographical patterns are those for the age groups 25-44 years and over 65. These two maps reveal a strong north-south contrast. There is a strong youthful component in the rural southwest (around Tinahely) which contrasts with the rural areas in the hinterland of Arklow.

The effect of the contrasts in age profiles is more clearly demonstrated on the **dependency** ratio maps (<u>Maps 20 and 21</u>). The youth dependency ratios are as expected highest in the areas of most recent growth while the elderly dependency ratio displays a very pronounced contrast between the north and south of the county. Finally, looking to the future <u>Map 22</u>

⁵ Department of the Environment and Local Government Spatial Planning Unit, The Irish Urban System and its Dynamics, 2000

⁴ Wicklow County Council Development Plan 2001

provides a measure of demographic vitality (persons aged 20-39 years in 1996 as a ratio of number of persons aged over 60), which clearly demonstrates the potential for further growth as a result of natural increase in most of the districts from Bray to Wicklow town, and also in parts of the northwest.

Table 5: Age profile and Dependency ratios, 1996

	Meath	Kildare	Wicklow	Dublin	Ireland
% aged < 15	26.1	26.5	24.9	22.0	23.7
% aged 15-24	16.8	18.1	16.5	18.6	17.5
% aged 25-44	28.2	30.6	28.6	30.3	28.0
% aged 45-64	19.3	17.6	19.8	19.1	19.4
% aged 65 +	9.7	7.2	10.1	9.9	11.4
Youth dependency	40.6	39.9	38.4	32.3	36.5
Elderly dependency	15.1	10.8	15.6	14.6	17.6
Vitality ratio	286.6	438.4	283.4	337.1	258.3

Source: CSO Census 96 volume 2 Ages and Marital Status

Table 6: Age-group by Sex, County, Urban District and Rural District

District	Age gr	Age groups (Males/females) 1996									
	0 –14 15 – 24			25 –44 45 – 64		65+					
	М	F	М	F	М	F	М	F	М	F	
Arklow Urban	1.052	1,038	735	709	1,185	1,219	857	831	381	512	
Bray Urban	2,980	2,947	2,397	2,204	3,419	3,727	2,434	2,516	903	1,725	
Wicklow Urban	865	792	512	568	921	974	575	618	238	353	
Rathdown No. 2 Rural District	2,096	2,012	1,380	1,275	2,199	2,447	1,699	1,754	582	951	
Rathdrum Rural District	3,594	3,280	2,103	2,052	3,947	4,021	2,762	2,576	1,179	1,418	
Baltinglass Rural District	1,667	1,660	1,041	957	1,828	1,774	1,321	1,152	633	716	
Shillelagh Rural District	833	769	563	472	874	814	866	600	402	427	

Source: CSO Census 96 volume 2 Ages and Marital Status

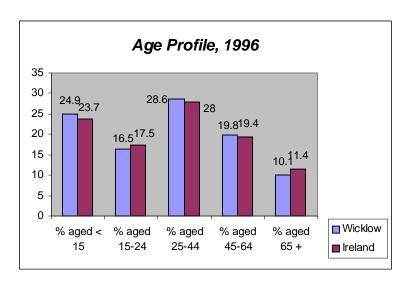


Figure 3

3. THE LABOUR FORCE

The labour force consists of the total at work, the number of unemployed persons and the number of first time job seekers. In 1996 the total labour force in Wicklow was 42,600, of whom 85% were classified as "at work". Almost 34,500 persons aged 15 and over were not in the labour force -47% of these were classified as engaged in home duties and 26% were students, Table 7.

Table 7: Persons aged 15 and over, classified by principal economic status

Economic Status	Total Persons 1991	Total Persons 1996	Males	Females
In Labour Force				
At work	30,338	36,423	22,924	13,499
Looking for 1 st regular	975	713	414	299
job				
Unemployed	5,557	5,464	3,889	1,575
Total in Labour Force	36,870	42,600	27,227	15,373
Not In Labour Force				
Student	7,546	9,131	4,462	4,669
Home Duties	17,094	16,308	107	16,201
Retired	6,350	6,382	4,483	2,389
Unable to work	1,941	2,164	1,440	724
(sickness/disability)				
Other	80	63	57	6
Total Not in Labour	33,011	34,498	10,509	23,989
Force				

Source: CSO CENSUS 96 vol. 5 Principal Economic Status and Industries

Changes in the size of the labour force are influenced by demographic trends, especially migration patterns, and participation rates. This is reflected in the pattern shown on $\underline{\textit{Map 23}}$ – see also $\underline{\textit{Maps 11}}$ and $\underline{\textit{13}}$.

There has been an upward trend in female participation rates over the period since the early 1980s. This is due to a combination of factors such as improved educational levels, removal of barriers preventing married women from working in some sectors, a lower marriage rate and declining average family size. In addition for many younger couples there is an economic necessity for both partners to be at work in order to pay the costs of privately owned housing. It is estimated that between 1996 and 2000 the total number at work increased by over 7,000 (20%) to 43,837. There is now relatively little scope for further increases in participation rates among the younger age-groups.

3.1 Participation rates

In Wicklow the overall participation rate in 1996 was 55.3%, almost identical to the rate of 55.4% for the State. The overall rate is the outcome of combining an above average male participation and a female rate that is slightly less than for the State (**Figure 4 and Table 8**).

Table 8: Labour force participation rates, 1996

	Dublin	Kildare	Meath	Wicklow	Ireland
Male participation rate	72	74.1	73.8	72.2	70.7
Female participation rate	46.7	42.3	39.5	39.1	40.7
Total participation rate	58.6	58.2	56.7	55.3	55.4

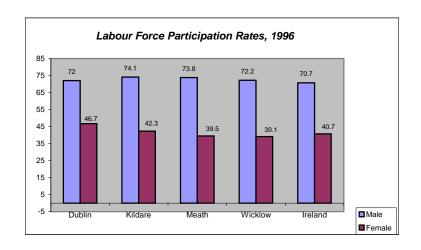


Figure 4

Variations in the total participation rate (Map 24) are influenced by the age profile and especially by the variation in female rates (Map 25). The highest overall rates and the largest numbers of participants are in the north and east reflecting the large numbers of commuters. The lowest rates are mainly in rural areas in the south especially between Wicklow town and Arklow.

3.2 Sectoral employment patterns

The sectoral distribution of **employment** is presented in Table 9. Agriculture, forestry and fishing accounted for 8.5% of the total at work in the county compared with 10.2% for the State in 1996. The much greater relative importance of the sector in the south, especially in

the mountainous areas, is shown on <u>Map 26</u>. In most of these areas the very high reliance on agriculture (over 41% in 14 DEDs) is a reflection of the limited range of alternative employment opportunities, unlike the northeast or near the main urban centres.

Manufacturing industries account for 17.5% of the total at work, a little less than the share of 19.1% in the national workforce. The total number of manufacturing employees residing in Wicklow increased by 13% (727) between 1991-96. This sector is of greatest importance in the districts around the principal towns and also in the southwest and around Blessington in the northwest *Map 27*.

The total service sector accounts for about 57% of the workforce, and it is also the most rapidly growing sector with gains particularly strong among those employed in commerce (including retail), insurance and finance and also in the number employed in professional services. It is also in these two sectors that the largest increases in female employment have occurred with females accounting for 69% of the increase in the number in the professional services sector.

Table 9: Number of persons at work classified by broad industrial sectors 1996

Sector	Males 1996	Females 1996	Total 1996	Males Change 1991-96	Females Change 1991-96	Total Change 1991-96
Agriculture, forestry, fishing	2658	439	3097	-581	77	-504
Mining, quarrying, turf production	119	8	127	24	3	27
Manufacturing	4632	1730	6362	482	245	727
Electricity, gas and water supplies	308	59	367	46	16	62
Building and construction	2673	144	2817	351	17	368
Commerce, insurance, finance	4994	3584	8578	457	805	1262
Transport, communication, etc	1553	369	1922	343	132	475
Public admin. & defence	1305	559	1864	82	51	133
Professional services	2404	4173	6577	488	1084	1572
Others	2278	2434	4712	985	978	1963
Total at work	22924	13499	36423	2677	3408	6085

Source: CSO CENSUS 96 vol. 5 Principal Economic Status and Industries

The geographical distribution of those at work in commerce, insurance and finance activities is very much concentrated along the east coast and in the north and northwest <u>Map 28</u> reflecting the influence of Dublin based employment opportunities for many residents in the commuter towns and villages. The distribution of workers in the professional services sector (<u>Map 29</u>) is even more focused around the main urban centres, with small local

concentrations in the southwest, related perhaps to the presence of the Cheshire Homes Centre and also the Kerry Foods distribution outlet in Shillelagh.

Labour force projections prepared for the County Development Plan suggest that an increase of approximately 40% between 1991 and 2006. Most of the increase will be associated with further expansion of the service sector. Furthermore, it is envisaged that up to 90% of the increase will take in the north of the county.

3.3 Unemployment

In 1996 there were 5,464 unemployed persons and 713 first time job seekers in the county amounting to 15.0% of the labour force. The highest rates were mostly along the east coast in parts of Bray, Wicklow town and Arklow, as well as many of the districts in the southwest (*Map 30*). Of course, since 1996 there has been a very large reduction in the unemployment rate to about 4% throughout the state. The number of persons on the Live Register in Wicklow declined by 55% from almost 8,000 in April 1996 to 3,568 in April 2001. The largest concentration is in the Bray area followed by Arklow and Wicklow town. In April 2001 31.6% of those on the Live Register had been unemployed for more than one year with the highest proportions of long term unemployed in Arklow and Wicklow town. The percentage of the total on the Live Register declined by almost 68% between 1996 and 2001 with by far the largest reductions in the Baltinglass and Bray areas.

Table 10: Number on Live Register

	April 199	06	April 2001		1996 – 200	01
	Total	% Total Persons duration>=1yr	Total	% Total Persons duration>=1yr	Actual Change	% Change duration>=1yr
Arklow	1,603	42.92%	954	37.63%	-649	-47.8
Baltinglass	776	52.84%	352	26.70%	-424	-77.1
Blessington*	380	38.42%	N/A	N/A	N/A	N/A
Bray	4,019	47.70%	1,555	26.95%	-2,464	-78.1
Wicklow	1,149	42.04%	707	36.07%	-442	-47.2
TOTAL	7,927	45.97%	3,568	31.59%	-4,359	-67.8

^{*} Blessington office closed August 1999

Source: CSO, Cork

3.4 Economic Dependency

The **economic dependency ratio** defined as number of persons not at work as a percentage of those at work provides a succinct summary of the relationship between the demographic structure and the workforce. The main pattern on <u>Map 31</u> is the divide between the east coast and southern districts and most of the rest of the county. The high values

along the east are probably associated with the more youthful population structures while in the southwest the high ratios are more due to lower labour force participation rates.

4. THE ECONOMY

This section provides an overview of the current position in relation to the three main sectors: agriculture, manufacturing and internationally traded services, and other services including tourism.

4.1 Agriculture, Forestry and Fisheries

Traditionally, Wicklow has been heavily dependent on agriculture and forestry. There is a very marked contrast in land-use potential between the upland and lowland areas. The upland areas are extremely limited due to presence of extensive tracts of blanket bog and also steep slopes, shallow depth and imperfect or poor drainage. Such areas are mainly used for sheep grazing with large tracts of afforestation also present. By contrast most of the lowlands are occupied by dry mineral soils which have a wide use range. The only exceptions are to the north of Arklow where poor drainage can be a limitation and also parts of the southwest the coarse texture of the soil imposes some limitations. Thus while 68% of the county is considered to be suitable for agriculture, 86% of this area is classified as disadvantaged.

An overview of the structure of agriculture in Wicklow is provided in Table 11 and in **Figure 5a,b.** Compared to other parts of Ireland the average farm size, measured in either hectares and or gross output, is very favourable. The percentage of farmers that are elderly is relatively low as is the percentage that are part-time. However, the situation is changing rapidly. Recent estimates prepared by Teagasc suggest that only about one-fifth of all farms are likely to remain economically viable. Another 50% are capable of reaching viability with proper management and off-farm investment. The more marginal farmers are mainly located in the central upland areas. Using Teagasc data it has been estimated that at least 46% of farms in Wicklow generated a family farm income of less than £6,000 in 1999. Recent estimates suggest that three fifths of all farm households now have off-farm sources of income, compared with one-third in the early 1990s⁶.

The availability of small area data on agriculture is very limited as the published data relates to the 1991 Census of Agriculture. Recent estimates prepared by the CSO from sample surveys taken in 1997 suggest that the area of cropland in Wicklow may have increased by about 1,000 hectares since 1991 and the total number of cattle may have increased by about 7,500. Data from the 2000 Census are expected to be available later this year.

Maps based on the 1991 agricultural census data show the broad patterns in relation to agricultural production. The largest farms measured in hectares are mainly located on the dry mineral soils in the east but they are also in the mountain range (Map 32). The north and northwest is mostly characterized by smaller farms. When account is taken of the value of the agricultural output a very striking contrast is evident between the low-lying eastern districts and most of the rest of the county (Map 33). The economic returns are particularly low in the central upland areas.

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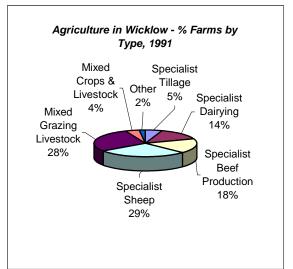
⁶ Teagasc Report on Farming in County Wicklow, 1999

Table 11: Principal characteristics of agriculture in Mid-East counties, 1991

	Meath	Kildare	Wicklow	Dublin*	Ireland
Avg. farm size (ha.)	33.9	37.8	38.1	32.6	26.0
Avg, farm size (ESUs)*	16.8	15.3	17.1	19.2	11.6
% farmers aged >65	20.8	20.5	20.1	20.2	22.8
% farmers part-time	33.0	31.6	24.7	34.5	26.6
Marginal land % of total	12	32	47	11	49
Specialist tillage %	6.7	11.8	5.3	26.9	2.9
Specialist dairying %	21.5	11.4	14.1	7.4	24.4
Specialist beef production %	38.3	31.9	17.9	21.0	42.1
Specialist sheep %	6.4	10.9	27.9	7.9	8.8
Mixed grazing livestock %	22.1	24.6	28.4	20.7	17.9
Mixed crops & livestock %	3.4	7.4	4.4	5.0	2.5

One ESU = 1,200 Euros

Source: CSO Census of Agriculture 1991



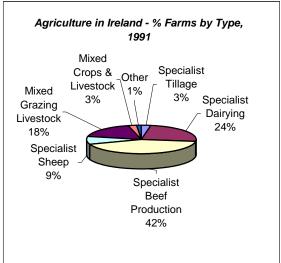


Figure 5 a and b

The extent of local specialization in farm types is summarized on <u>Maps 34</u>, <u>35</u>, <u>36</u>, <u>37</u>, <u>38</u> Specialist sheep rearing (farms on which more than two-thirds of gross output comes from sheep rearing) is not surprisingly the most common type of farming in the mountain range. The second most common category of single enterprise farms is the specialist beef producers. They are particularly strongly represented in the west. Sheep and young cattle are frequently maintained on the same farms, described as mixed grazing livestock farms on <u>Map 34</u>. This type is strongly represented in both the upland areas and in many of the western districts. The more commercially oriented dairying and tillage farms which together account for less than one-fifth of the total are mainly confined to the southeast and west (dairying, <u>Map 37</u>) and the eastern lowlands in the case of tillage (<u>Map 38</u>).

There have undoubtedly been many changes since then following the reforms of the CAP. The direction of agricultural policy is away from direct price supports and more towards direct payments to producers. The likelihood is that there will be a large increase in part-time

farming especially among those rearing beef cattle. Greater emphasis will be placed on more environmentally sustainable agriculture and it is also envisaged that more farmers will participate in the Rural Environmental Protection Scheme (REPS). It is also expected that more farmers will seek off-farm employment to supplement their incomes.

Forestry is a major landuse in Wicklow, occupying almost 42,000 hectares or one-fifth of the total area of the county, *Map 39*. Approximately three quarters of the total planted area is owned either by, or on behalf of, the State. There has been a very significant decline in planting over recent years. The area planted by Coillte declined from 325 to 62 hectares between 1995 and 1999. Over the same period the area of private planting declined from 537 to 366 hectares. These changes in levels of planting reflect national trends and may in part be influenced by the availability of agri-environmental payments under REPS. In addition to the planting and growing of trees there is a significant timber processing sector, though the total number employed in the sector has declined considerably.

Fishing takes place form the ports at Arklow and Wicklow. Total employment in the sector is estimated to be 122 persons, including 25 part-time workers. In addition to their role as bases for fishing activities, both ports are important for other commercial activities. They are important components of the physical infrastructure resources of the county. Despite large fluctuations in its export trade Wicklow has a reasonably stable import trade which generates sufficient revenue for the port to maintain a dependable level of income. The position of Arklow is less encouraging. Indeed, given its very high reliance on a single major commercial company its future prospects are regarded as vulnerable.

4.2 Manufacturing and Internationally Traded Services

The profile of the manufacturing and internationally traded services sector in Wicklow is very different from those in the two other counties in the Mid East region. The database compiled by Forfás provides details in relation to employment actually located in the county. In 1999 one-sixth of all employment was in food and drink sector with 14% in the chemical sector and a further 10% in the paper, printing and publishing sector. Only one-eighth of workers are in the electronic equipment sector compared with 20% for the State. However, Wicklow has the second highest (after Dublin) percentage (16.6%) employed in international services, mostly in call centres located in Bray.

An analysis of the industrial profile is summarized in **Table 12**, which also contains comparative data. The foreign owned sector consisting of 27 companies in 1999 accounted for 41% of all employment compared with 69% in Kildare and 55% in Dublin. Between 1995-99 three-fifths of the net gain in employment in manufacturing and internationally traded services was generated by foreign owned firms. Some indications of the relative strength of the sector are provided by indices such as the proportion of employment in advanced sectors **(Figure 6)**, the level of output per worker **(Figure 7)**, and the low percentage of net output required for wages and salaries.

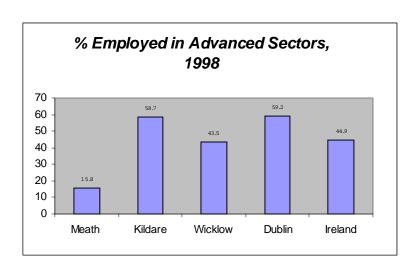


Figure 6

Table 12: Industrial indicators for Dublin and Mid-East counties

	Meath	Kildare	Wicklow	Dublin	Ireland
No. of Industrial plants 1999	138	141	135	1716	5474
Total employment in mfg. and intnl. traded services 1999	5931	14393	8091	102558	324422
Net employment gain 1995-99 All firms	531	3274	1609	32637	62524
Net employment gain 1995-99 Foreign-owned	- 118	2307	964	22781	39453
Net employment gain 1995-99 Irish-owned	649	967	645	9656	23071
% employed in advanced sectors	15.8	58.7	43.5	59.2	44.9
Share of employment in five Largest firms	21	49	29	7	N/A
GVA per person employed 1998 (Ireland = 100)	42.9	109.0	140.5	133.4	100.0
Wages and salaries as % of net output	42.6	16.7	13.4	25.9	16.9
Ratio of industrial to Admin/ Technical workers	6.3	2.6	4.5	3.9	4.5

Source: Forfás database and CSO Census of Industrial Production, 1998



Figure 7

In 2000 there were 25 foreign owned firms located in Wicklow that have been assisted by IDA Ireland. Their total employment was over 3,000 workers. Almost all are located in the east (Map 40) with the largest concentration in Bray (10 firms) followed by Arklow (7) and Blessington (3).

The Irish owned manufacturing sector is extensive with approximately 140 companies assisted by Enterprise Ireland. There may be others that have not received assistance and are, therefore, not included in the Enterprise Ireland database. The vast majority of the companies are classified as either micro (1-10 workers) or small (11-50 workers). In 1999 out of the total of 139 there were 70 micro companies and 50 in the "small" category. There were only seven firms with more than 100 workers. The size distribution is important to the extent that it influences the possibility of achieving economies of scale and also the potential for developing a strong base of internationally competitive enterprises.

The geographical distribution of Enterprise Ireland supported companies is, as expected, more dispersed than the pattern for foreign owned companies. <u>Map 40</u> displays the number of companies by DED while further details are contained in Table 13. The largest concentration is in Bray (55 companies) followed by Arklow, Blessington and Wicklow town.

Enterprise Ireland (EI) is the principal agency supporting locally controlled manufacturing and internationally traded service industries. It has a government mandate to contribute to driving the growth of regional enterprise. Within the Mid East region its task is to ensure that the towns within the extended commuting distance of Dublin are developed with a good quality of life and a mixed economy so that they will attract new industries to the area. The EI strategy for developing locally controlled enterprises is based on four pillars:

- 1. Developing and sustaining existing businesses,
- 2. Enhancing the environment for business,
- 3. Identifying and encouraging new start-up companies with strong growth potential,
- 4. Identifying new opportunities for economic development, including investments by Dublin based companies who may wish to expand.

Table 13: Distribution of Enterprise Ireland assisted companies, Wicklow 2000

	Size					
Town	Large	Medium 1	Medium 2	Small	Micro	Total
Arklow	0	1	2	7	8	18
Ashford	0	0	0	1	0	1
Aughrim	0	1	0	0	0	1
Baltinglass	0	2	0	4	0	6
Blessington	0	2	0	5	5	12
Bray	1	4	1	16	33	55
Calary	0	0	0	0	1	1
Carnew	0	0	0	2	1	3
Dunlavin	0	0	0	2	0	2
Enniskerry	0	0	1	0	1	2
Glendalough	0	0	0	0	1	1
Glenealy	0	1	0	0	1	2
Glenmalure	0	0	0	1	0	1
Greystones	0	0	0	0	2	2
Kilcoole	0	0	0	2	4	6
Kilmacanogue	0	1	1	0	2	4
Newcastle	0	0	0	1	0	1
Newtownmount	_					
kennedy	0	0	0	1	1	2
Rathdrum	0	0	0	1	4	5
Rathnew	0	0	0	3	0	3
Shillelagh	0	0	0	0	1	1
Tinahely	0	0	0	1	0	1
Wicklow	0	0	1	3	5	9

Micro = 1-10 workers; small = 11-50; medium 1 = 51-100; medium 2 = 101-250 workers; large = 250+

Responsibility for fostering and sustaining micro enterprises rests with Wicklow County Enterprise Board. The Board provides a range of services that include;

- 1. Developing an enterprise culture,
- 2. Providing business counselling/advice and mentoring,
- 3. Management training and development
- 4. Financial assistance.

In accordance with government policy the Enterprise Board has responsibility for the development and support of micro enterprises. Where appropriate particular aspects of micro enterprise support can be delivered by agreement through agencies such as Wicklow Rural Partnership, which already has experience in this area of activity. Between 1993 and February 2001 Wicklow County Enterprise Board has assisted 307 companies (Map 41) that resulted in 421 fulltime and 99 part-time jobs. The largest concentrations of projects are in Wicklow town (60) and Bray (56) followed by Arklow (29), Ashford and Blessington (15 each) and Greystones (14). In addition to the provision of direct financial support for projects the Enterprise Board provided training for approximately 2,000 persons, of whom approximately 60% were women.

The geographical distribution of industries in the future will be influenced to a large degree by the availability of serviced industrial land. The policy of Wicklow County Council is that "the Council's industrial land purchasing policy shall promote the growth centre strategy to ensure a better distribution of employment throughout the county" (County Development Plan,2001, p.29). Specific regard will be had to the provision of additional land for industrial development in the towns of Greystones/ Delgany, Arklow, Wicklow, Baltinglass, Carnew and Aughrim.

4.3 Services

The service sector accounts for 57% of the total workforce and it is also the most rapidly growing sector. It is also the sector in which most females are employed. As already shown the distribution of service workers is very much influenced by access to urban centres as most services (retailing, business services, personal services and professional services) are provided from nodal locations. Future expansion of the sector will depend on a number of factors such as local demand for traded services. For internationally traded services there are different requirements such as the availability of a workforce with appropriate skills plus key infrastructure (especially for ICT based services) and attractive work environments at accessible locations. These services are mostly located in Bray.

In addition to urban based services **tourism** is also a major service industry which can bring significant economic and social benefits to rural villages and small towns. County Wicklow has an extensive number of visitor attractions (<u>Map 42</u>) including Glendalough, Powerscourt waterfall, Lough Dan and Lough Tay as well as Blessington lake. Glendalough is one of the most popular visitor attractions in Ireland. While many of the attractions are located on the edge of the mountain range the National Park in the central uplands is also a very major tourism resource. There are also many other amenities to attract visitors (<u>Map 43</u>).

Compared with other counties tourism is comparatively under-developed in Wicklow with just 292,000 bed nights in 1998 compared with 877,000 in Galway. The main source of visitors is the domestic market, with many visiting the county as day trippers. from Dublin. Data from Bord Fáilte suggests that Wicklow received 302,000 overseas visitors in 1999, which generated £49 million in revenue, by far the largest of the counties in the Midlands East region. Compared with 1993 overseas tourism revenue increased by £22 million or 81%. The increase for the State over the same period was estimated at £831 million, 82%. Further development of the sector will need to take account of the carrying capacity of the natural environment and comply with the best practices in relation to sustainable tourism development.

The Midlands East Regional Tourism Authority has responsibility for providing tourist information in the county. Offices are located in Wicklow town, Glendalough, Avoca, Arklow and Blessington. Information is also provided by others including Wicklow County Tourism (WCT) and Wicklow Rural Partnership (WRP). WCT is mainly a co-ordination body. Wicklow County Council and Dúchas each have roles in relation to the provision of tourism infrastructure including toilet facilities, walkways and signage.

5. THE SOCIAL CONTEXT

This part examines the structure of society in Wicklow. It commences with an overview of levels of educational attainment in the population as education is widely regarded as a critical agent in both social and economic transformation. This will be followed by an

outline of the links between education and status in the labour force, and the geography of social stratification in the county. This will lead to a consideration of a number of aspects of social exclusion.

5.1 Education

The central role of education in social and economic transformation of Ireland over the past decade is well documented. Formal education is provided in Wicklow through 86 primary schools (including five special schools) and 21 secondary schools, which are mainly located in the towns and villages (*Map 44*).

Wicklow Vocational Education Committee provides an extensive range of courses from its nine second level schools, four community education centres (in Arklow, Blessington, Bray and Wicklow town) and its Outdoor Pursuits Resource Centre in Baltinglass. The VEC also organises a county-wide literacy scheme which provides assistance to over 200 adults. The VEC also administers the Education Unit attached to the open prison at Shelton Abbey, Arklow.

There is no Third level college in County Wicklow. However, students from the county have access to a wide range of universities and other third level colleges in Dublin as well as the NUI Maynooth in north Kildare and the Institutes of Technology in Carlow and Waterford. In 1998/99 there were 2,627 students from Wicklow attending third level colleges in the State. By far the largest share (2,008) were attending Dublin colleges, followed by 165 attending Waterford IT, 139 at IT Carlow and 86 at NUI Maynooth⁷. The overall participation rate in third level education in Wicklow is slightly above the average for all counties.

The Bray Institute of Further Education is collaborating with the Open University to provide degree level courses in Psychology, Health and Social Care, Social Science and Music. A number of Certificate level courses are provided by NUI Maynooth, NUI Galway and UCD at venues in Arklow, Blessington, Bray and Wicklow town.

The census of population provides information on the highest level of formal education attained by all persons aged over 15 years. The distribution of the population according to **educational attainment levels** is summarized in Table 14 which also contains comparative data for the other counties in the Greater Dublin Area. The Wicklow profile is very similar to the one for the State, **Figure 8.**

Table 14: Percentage distribution of population aged 15 years and over by highest level of education completed 1996

	Dublin	Kildare	Meath	Wicklow	Ireland
Primary	24%	24%	27%	26%	29%
Lower Secondary	18%	21%	22%	20%	20%
Upper Secondary	29%	32%	31%	30%	29%
Third level - non degree	10%	11%	10%	11%	9%
Third level - degree or higher	14%	10%	8%	10%	10%
Not Stated	4%	2%	2%	3%	3%
Total	100%	100%	100%	100%	100%

⁷ data provided by the Higher Education Authority

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The geographical distribution of persons with different levels of education is clearly influenced by many of the other variables that have been examined already, especially the age profiles and the extent of net in-migration. The contrast between the more youthful population in the more accessible northern and eastern parts and the more rural southern districts is clearly illustrated on *Maps 45 and 46*.

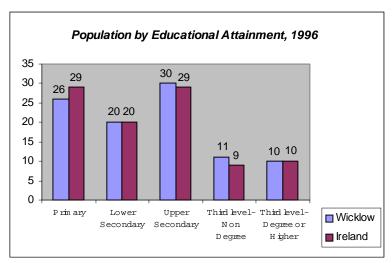


Figure 8

5.2 Social Classes

Educational attainment levels have a strong influence on occupational choices, which together with information on status in the labour force (employed vs unemployed), largely determines the **social class** to which individuals are assigned by the Central Statistics Office.

In Wicklow 21% of the population are classified as belonging to either social classes 5 (semi-skilled) or 6 (unskilled workers) compared with 22% for the total population of Ireland. These social groups are very strongly represented in the rural parts of the county especially in the uplands and southwest (Map 47).

The distribution of social classes 1 and 2 (professional and managerial/ technical workers) is almost the reverse of that for classes 5 and 6 (Map 48) with the highest concentrations in the more urbanized districts in the east and north. Taken together Maps 47 and 48 suggest a high level of spatial segregation of social classes between different parts of the county, which is more than the traditional rural-urban divide. At a micro geographical scale it is very likely that urban residential development patterns have also contributed to social class based spatial segregation.

Table 15: Percentage distribution of population by social classes, 1996

	Dublin	Kildare	Meath	Wicklow	Ireland
1. Professional workers	7%	5%	5%	6%	5%
2. Managerial and technical	24%	24%	23%	24%	22%
3. Non-manual workers	20%	21%	17%	17%	18%
4. Skilled manual Workers	18%	20%	23%	21%	20%
5. Semi-skilled manual Workers	12%	11%	12%	12%	13%
6. Unskilled Workers	6%	9%	10%	9%	9%
7. Others	13%	10%	9%	10%	12%
8. Total	100%	100%	100%	100%	100%

Source: CSO Census 96 vol. 7 Occupations

5.3 Social Inclusion

The promotion of a more inclusive society is a key objective of development strategies for the future. It is an "essential aspect" of the vision underpinning the report by the National Economic and Social Council on "Opportunities, Challenges and Capacities for Choice" (1999). Social inclusion is defined as being essentially about full participation in society. Such participation is possible only with access to core, taken-for-granted rights and the fulfillment of the associated obligations that characterize full membership of society. The National Development Plan 2000-2006 also identifies social inclusion as a core objective.

While there is broad agreement on the objective there are difficulties when it comes to measuring the extent of social exclusion. Due to the very significant data limitations it is necessary to rely on a number of proxy variables to identify the distributions of groups that may be at risk of experiencing some form of social exclusion. It is important to note that all persons described by a particular proxy variable may not be experiencing exclusion. The approach taken here is to consider a number of proxy indicators.

5.3.1 Long-term unemployment

One measure that may help to identify districts where some persons may be at a high risk of social exclusion is the distribution of long-term unemployed persons. While there are undoubtedly concentrations of the incidence of long-term unemployment within most of the urban centres, which are masked by the ratios calculated for entire districts, *Map 49* also identifies a number of rural areas, especially in the west where over sixty percent of the unemployed were out of work for more than one year. The data in Section 3.3 on trends in the Live Register show that the highest absolute levels of unemployment are in the main towns and that the highest percentages of persons on the Live Register for more than one year are in Arklow and Wicklow town. The severity of the problems in Bray has been recognized by the inclusion of the town in the list of 25 areas selected for inclusion in the R.A.P.I.D programme launched by the government in 1999. The programme to Revitalise Areas by Planning Investment and Development (R.A.P.I.D) will provide funding for health, education, housing, childcare, sporting facilities, youth development, anti-drugs measures and policing.

5.3.2 Elderly persons living alone

The number of elderly persons living alone is another proxy measure that is frequently used in studies of potential social exclusion. In 1996 there were 2,581 persons aged over 65 living alone, one-quarter of the total aged over 65 years. Females in this category outnumber by males by more than two to one. The distribution of over 65s living alone as a percentage of the total population reflects to some extent the overall age profile with the highest rates in the most rural areas, especially in the southwest (Map 50). A number of issues related to the housing needs of the elderly are considered in the Wicklow Draft Housing Strategy, 2001. A particularly noteworthy initiative is a County Council housing development in Avoca which will be allocated specifically to elderly persons as part of a strategy to re-integrate them back into a town or village environment.

5.3.3 Lone parent families with young children

Another group that have been established to be at a high risk of experiencing some forms of social disadvantage are lone parent families with all children aged under 15 years. These parents may experience difficulties in relation to obtaining housing and also in regard to participation in the labour force which may be exacerbated by the limited availability of affordable childcare facilities in some areas. <u>Map 51</u> shows a marked difference between east and west Wicklow in the proportion of lone parent families.

5.3.4 Persons with a disability

Table 16 shows that in 1999 there were 2,849 persons in county Wicklow in receipt of disability payments, an increase of 33.6% from 1996. The table also shows that there were almost 1,200 persons in receipt of invalidity pensions. People with disabilities are a target group for the local development agencies which seek to ensure equal access to facilities and services.

Table 16: No. of recipients of Social Welfare benefits 1999 and percentage change 1996-99

	Meath	Kildare	Wicklow	Dublin	Ireland
One parent family	1540	2468	2289	26983	70387
Allowance 1999					
% change 1996-99	43.0	49.0	40.5	30.9	39.2
Disability payments	2733	3760	2849	28602	107057
% change 1996-99	36.2	38.7	33.6	21.9	33.0
Invalidity pensions	1050	1414	1199	15920	46946
% change 1996-99	18.9	12.3	8.3	6.0	9.1
No. on live register	2753	4347	4784	45483	176539
% change 1996-99	- 30.4	- 44.7	- 36.8	- 45.6	-34.6

Source: Department of Social, Family and Community Affairs

5.3.5 Access to Childcare facilities

The availability or non-availability of childcare facilities is another factor that may contribute to social exclusion arising from an inability to participate in the workforce outside the home or to participate in education programmes. The National Childcare census undertaken by ADM in 1999 identified just over 100 childcare facilities (Including community based and privately owned facilities) in the county, mostly in the larger urban centres, especially Bray. A number

of rural areas were identified as being very poorly served. They include some of the most disadvantaged areas, in particular around Baltinglass, Shillelagh and Rathdrum (Map 52)⁸.

The more limited availability of facilities and the poor quality of the public transport service in rural areas further exacerbates the problems associated with childcare for women with limited financial resources in those areas. Over recent months funding has been made available to the Health Authority to assist with the provision of better quality and more accessible facilities.

5.3.6 Travellers

Travellers are a group that has traditionally felt excluded from many aspects of mainstream society. In February 2001 Wicklow County Council adopted a Traveller Accommodation Programme for the period 2000-2004. The programme will involve provision of a variety of forms of accommodation including standard housing, group housing schemes, single-site housing, permanent and transient halting sites. Three halting sites have been provided in the east of the county (Map 53) that can accommodate 18 families. The Wicklow Draft Housing Strategy has identified a need for 96 units between 1999 and 2002, of which 28 are required in the Arklow UDC area, 20 in Wicklow UDC area and 9 in Arklow UDC. In March 2001 there were 28 roadside traveller families requiring accommodation.

5.3.7 Asylum Seekers

At the end of April 2001 there were 53 asylum seekers residing in five hostels in the county of Wicklow. If some or all of these persons are successful in their applications for asylum there will probably be additional pressure on the Local Authority housing lists.

5.3.8 Homeless Persons

The true extent of homelessness in county Wicklow is difficult to estimate due to the absence of reliable data. The most recent estimate is that in 1999 there were 21 homeless persons in Wicklow in need of housing. This is a particularly vulnerable group who require not only accommodation but also outreach services, health, education and training, and social welfare services.

5.4 Community Development

Wicklow Rural Partnership and the Bray Partnership Company have been very active in promoting initiatives to support community development and in targeting resources towards the alleviation of problems that may be contributing to social exclusion. The Wicklow Community Platform (WCP) was established in 2000 with the support of the three Local Development Programme companies in the county (Arklow Community Enterprise, Bray Partnership and Wicklow Working Together) as a forum to represent the views of community and voluntary groups with a social inclusion focus. The membership of WCP includes women's groups, physical and mentally handicapped groups, family resource centres, travellers groups, youth groups, unemployed groups and education groups. The second forum to represent the views of community & voluntary groups is Wicklow Communities Networking (WCN). Membership of WCN includes a broad base of community development groups countrywide. WCN was established by Wicklow Rural Partnership with the assistance

⁸ ADM National Childcare Census Report – County Wicklow, 1999

of Wicklow County Council. <u>Map 54</u> illustrates the distribution of community based groups throughout the county, and confirms that the largest concentrations are in the more densely populated areas. The community groups in each of the Electoral Areas are classified according to their principal focus on **Figure 9**.

Arklow Community Enterprise has provided training for 170 persons since 1998, the vast majority (90%) were females. Wicklow Rural Partnership administers the LEADER programme throughout the county. Between 1995 and 2000 it provided training for almost 3,000 persons. In addition it provided financial and other assistance for projects related to rural tourism, small firms and craft services, enhancement of the environment and living conditions as well as projects linked to agriculture, forestry and fisheries⁹.

Wicklow Rural Partnership used LEADER II funding and assistance from Wicklow County Council and the local communities to support a programme of refurbishing 20 community halls throughout the county. Funding has also been provided to support the establishment of 13 Information Technology centres in rural areas in order to improve access to training programmes and increase opportunities for employment.

6. QUALITY OF LIFE

The importance of maintaining and enhancing the quality of life for all members of the population has emerged as an objective in many recent studies that have begun to articulate a sustainable concept of development. Indeed, one of the five objectives of the National Spatial Strategy is to "improve the quality of life for all sections of society". Research on Quantifying Quality of Life, undertaken by ERM for the National Spatial Strategy has identified different sets of factors that influence quality in rural and urban contexts.

In rural areas key issues are the provision of education at first and second levels and also employment and training opportunities. Other important issues are health care provision, leisure and recreation facilities and public transport. Access to public transport is particularly significant in the more disadvantaged rural communities, especially for persons and households belonging to the lower social classes.

For towns and villages ERM identified a large menu of factors that contribute to a good quality of life. Places that have the majority of the following attributes are regarded as having a good quality of life:

- good income level and distribution,
- > high level of personal material assets (e.g., home ownership)
- access to economic, social and physical infrastructure.
- > low crime level,
- good quality affordable housing units,
- balanced social mix,
- good community interaction (clubs, organisations, etc),
- high quality historic heritage,
- balanced employment mix.

⁹ Wicklow Rural Partnership Ltd. Annual Report 1999-2000

The term 'quality of life' is used here in a broad sense to describe the conditions that contribute to a sustainable quality of life experienced by residents of the county. It is a multi-dimensional concept that embraces issues related to cost of housing, the quality of the natural environment and the cultural heritage; the availability of health services and other forms of social supports and protection; provision of recreational and leisure facilities, and parity of access to information. Most of the themes discussed in previous sections are also relevant to this concept especially access to education, range and quality of employment opportunities, settlement patterns which affect travel to work times, spatial segregation of social classes, and initiatives to overcome barriers to social inclusion, etc. In the remainder of this section data are presented on a number of indicators of the different dimensions noted above.

6.1 Housing

Section V of the Planning and Development Act, 2000 requires Planning Authorities to prepare Housing Strategies. The Wicklow Housing Strategy has been prepared against the background of increasing demands for residential accommodation resulting from the high concentration of employment within the Greater Dublin Area. The Strategic Planning Guidelines for the Greater Dublin Region published in 1998 and subsequently updated in 2000 and 2001 provide the spatial framework for future housing development in the county. At a regional level a key objective is to consolidate the Metropolitan Area in line with the principles of sustainable development. In Wicklow the consolidation policy will apply to Bray and Greystones/Delgany. The growth of the Metropolitan Area will be balanced by the concentration of development into major centres in the hinterland. Wicklow town has been identified as a primary growth centre and Arklow as a secondary growth centre. Most of the area beyond the Metropolitan Area and designated growth centres is proposed as a Strategic Green Belt where development should be primarily to meet local, rather than regional, needs.

The Wicklow Housing Strategy has estimated that housing will be required for an additional 5,256 new households by April 2005. The current supply of serviced land is considered to be insufficient to meet the estimated need for 5,250 new housing units. In order to cater for future housing needs a number of infrastructural and transportation developments will be required. These include

- a new source reservoir and treatment plant as well as a new waste water treatment plant for Arklow,
- upgrading and extending the water supply systems to Bray, Wicklow and Newtownmountkennedy,
- wastewater treatment systems serving Newtownmountkennedy, Kilcoole and Newcastle, Wicklow environs, Rathnew and Ashford, and Rathdrum,
- a new water provision system for west Wicklow including Baltinglass and Blessington,
- connections from the N11 to Greystones/Delgany.
- relief roads and N11 connections in the Wicklow environs, Rathnew and Ashford,
- improvement of commuter rail services to Kilcoole, Newcastle, Wicklow and Arklow,
- connections from Newtownmountkennedy to the DART stations at Bray and Greystones,
- improvements on the N81 servicing the western parts of the county.

Wicklow County Council and the Urban District Councils in Arklow, Bray and Wicklow have an extensive stock of social housing units, at a number of locations throughout the county. The total stock of the combined Local Authorities on June 1st 2001 was 3,949 social housing

units, of which the largest concentration (1,182 units) was in Bray followed by 488 in Arklow and 339 in Wicklow town. Over recent years the number of persons on the waiting lists of the combined Local Authorities for social and affordable housing increased from 1,240 in December 1998 to over 3,000 in June 2001. In order to meet the need for social and affordable housing the Wicklow Housing Strategy recommends that each of the Planning Authorities should aim to reserve 20% of the zoned residential land for this purpose.

6. 2 Quality of the natural environment

The concept of sustainable development has at its core the notion that development aimed to meet the needs of the current generation must not reduce the capacity of the environment to sustain the needs of future generations. In effect all development actions need to take account of their potential environmental impacts. There are a number of areas in Wicklow that are particularly important from an environmental perspective. These include 37 **Special Areas of Conservation** and 79 **Natural Heritage Areas** (Map 55). The most important NHAs are the Wicklow Mountains, the Poulaphuca Reservoir and the Murrough. The three most important SACs are the Murrough Wetlands, the Wicklow Reef and the Wicklow Mountains. A complete listing of all sites with grid references is available on the Dúchas website. Wicklow County Council and Dúchas have responsibility for protecting and preserving the designated heritage and conservation areas.

Four **rural landscape** zones and associated landscape categories are used in the Wicklow County Development Plan to produce a spatial framework for achieving a sustainable pattern of development throughout the county (*Map 56*). The Landscape zones and categories and an assessment of their vulnerability are summarised in Table 17. Further details are provided in the County Development Plan 2001, p.9-10. Specific objectives and development control criteria have been identified for each of these area types.

Table 17: County Wicklow Landscape zones and categories

Landscape zone		Landscape category	Vulnerability
OUTSTANDING	NATU	Mountain Uplands	Very High
BEAUTY		Northern Hills	
		Glencree/Glencullen	
		Poulaphuca Reservoir	
		Coastal Area	
SPECIAL AMENITY		North Mountain Lowlands	High
		South Mountain Lowlands	
		Baltinglass Hills	
		Southern Hills	
RURAL AREA		Rural Area	Medium
CORRIDOR AREA		Eastern Corridor	Medium
		Western Corridor	

Source: Wicklow County Council Development Plan, 2001

The Wicklow Uplands Council is a representative organisation established to ensure the future sustainable development of the Wicklow Uplands and to work towards full community participation in the decision making process in partnership with statutory bodies. Wicklow Uplands Council is supported by the Heritage Council, FÁS and Wicklow County Council.

The quality of the river waters in Wicklow is monitored by the County Council and the Environmental Protection Agency. **Water quality monitoring** began at a national level in

Ireland in 1971. Since then there has been a steady decline in the quality of Ireland's rivers and lakes. Moderate levels of pollution have been recorded at a number of monitoring stations on the Liffey, though most of these are outside county Wicklow (Map 57).

The deterioration in quality resulting from an increase in the total phosphorous load is mainly related to intensive farming practices and inadequately treated municipal waste water. Wicklow County Council has drawn on the experience gained from participation in the EU funded Three Rivers Project to prepare a management strategy that will seek to reduce the extent of pollution through a combination of enforcement of codes of good practice in all sectors (urban and rural) and promotion of awareness of the environmental hazards associated with certain activities. The overall objective is to restore the water system to 'good ecological status'. The term 'good ecological status' is applied to waters suitable for sustaining natural aquatic ecosystems, which are unaffected or only impacted by human activity.

The County Development Plan 2001 contains a commitment that Wicklow County Council will implement the provisions of the Rivers Liffey and Slaney Water Quality Management Plans in order to protect public health and the recreational and economic potentials of these watercourses. The Council will also protect the water quality of the rivers Dargle, Vartry and Slaney which are listed as salmonid rivers. Aguifer protection plans for the Brittas Bay district and other vulnerable aguifers will also be implemented.

In coastal areas there has been a considerable effort to ensure that beaches are compliant with the requirements of the Blue Flag programme. In 2001 the beaches at Grevstones. Brittas Bay North and Brittas Bay South were awarded Blue Flag status (Map 58).

A number of strategies and performance indicators in relation to environmental protection and the provision of sanitary and waste management services are contained in Wicklow County Council Corporate Plan for the period 2001 - 2004. For example, the performance indicators will measure progress in relation to the implementation of the Groundwater Protection Plan, the River Basin Management Plan, the achievement of regulatory targets, the number of on the spot fines and prosecutions, the percentage of drinking water samples in compliance with statutory requirements¹⁰.

6.3 The cultural heritage

Wicklow has a rich heritage of archaeological sites and monuments (Map 59). Historical buildings, country houses, demesnes and vernacular buildings, and heritage gardens. These include Russborough House, Powerscourt House and Gardens, Avondale House and arboretum, Mount Usher Gardens, Wicklow Jail and Tinahely Courthouse. In addition there are many items of industrial archaeological interest such as mills, roads and rail bridges as well as a strong mining heritage in both Avoca and Glendalough. All of these resources help to define the county's character and identity and thus contribute to the quality of life that can be experienced by Wicklow residents. However, many of these resources are already coming under intense pressure associated with the growth in tourism. In order to protect these resources for future generations it will be necessary to put in place appropriate management strategies. Carefully designed and appropriately located visitor centres, as at Glendalough, along with local traffic management strategies can be a central component of heritage management strategies.

¹⁰ Wicklow County Council Corporate Plan 2001-2004

The Arts Officer in Wicklow County Council is responsible for stimulating public interest in, and knowledge, appreciation and practice of the arts throughout the county. Arts Centres and venues have been established in Bray, Wicklow and Arklow as well smaller centres at Roundwood, Laragh, Tinahely, and Glenmalure (Map 60). The Tinahely Courthouse provides up to 75 events per annum. The Arklow Community Arts Centre organised 22 events in 2000 while the Signal Arts Centre in Bray was the venue for 31 events. There are also many groups involved in different arts activities (literature, music, theatre/drama, youth arts), especially in the east and north (Table 18).

Table 18: List of Performing/Cultural Groups in County Wicklow

 Literature Bray Poetry and Writers Group Bray Writers Group Greystones Writers Group 	 Youth Arts Wicklow Youth Theatre Dry Rain Youth Theatre Greystones Youth Orchestra Dunlavin Youth Orchestra
 Music Bray Choral Society Comhaltas Ceoltoiri Eureann Greystones Music Circle Greystones Orchestra Inver Ladies Choir Sleeping Giant Studio Productions Yahama music School Avoca Singers Bray Musical Society Blessington Musical Society 	Theatre
Dance Cara School of Irish Dancing	

Wicklow does not have any area designated as a Gaeltacht. However, according to the 1996 Census of Population a very significant proportion of the population is able to speak Irish. Over two-fifths of the population claim to have this ability in many districts in the west and also in the southeast in the hinterland of Arklow. The districts with low proportions coincide to some extent with the districts that have elderly populations (Map 61).

6.4 Availability of health services and other forms of social supports and protection

The vital statistics for the population of Wicklow can be summarised as consisting of a very high birth rate and a low death rate. There were 1,838 births in 2000 giving a birth rate of 17.1 per 1,000 population, the second highest after Kildare. In the same year there were 822 deaths resulting in a death rate of 7.7 per 1,000 population which is less than the rate of 8.2 for all counties. Annual estimates of the infant mortality (deaths of infants under one year per 1,000 births) and neo-natal mortality (deaths of infants under 28 days per 1,000 births) rates

are subject to considerable variation as they are based on small numbers. The data for Wicklow show that both rates are consistently below the average for all counties.

The primary responsibility for the provision of health services lies with the Eastern Region Health Authority. The nearest hospitals are Loughlinstown and St. Vincents for residents of the east of the county, Tallaght and Naas for those resident in the west, and Kilkenny and Wexford for the southwest (<u>Map 62</u>). The Regional Health Authority has a network of daycare centres throughout the county, some of which provide an excellent range of facilities and associated transport services, e.g. Carnew and Rathdrum. Sheltered accommodation is provided through the Cheshire Home at Shillelagh.

The activities of the Health Authority are complemented by a number of supports provided by the Department of Social, Community and Family Affairs. These include payments as pensions, benefits and allowances as well as employment supports under almost thirty different schemes. In addition funding is provided for the Wicklow Money Advice and Budgeting Service. The social welfare services are administered from three branch offices in Wicklow town, Blessington and Baltinglass as well as two local offices in Bray and Arklow (Map 63).

Over recent years there has been much concern over the provision of **postal services** in many rural areas. In addition to their primary function in relation to postal services the post office network is used for a wide variety of other services including:

Department of Social, Community and Family Affairs payments, Television licence sales, Bill payments (e.g., Eircom, etc) Money transfers, Savings and investments, National Lottery.

Rural post offices also serve as important meeting places for people who may have limited opportunities to visit the local village. Recent analysis has revealed that many post offices are loss-making operations and that the overall situation is likely to deteriorate further over the medium term. In order to maintain a rural network it will become increasingly necessary to generate new business. Currently the government is considering a number of options on how to maintain a public service facility in locations where the commercial viability of rural post offices may be in doubt.

There were 44 post offices in Wicklow in 1999, fourteen less than in 1931 (*Map 64*). The rural network (post offices in settlements with <1500 persons) consists of 34 post offices with an average population served of 1300, compared with the national average of 1000¹¹. Thus the overall position for the rural network in Wicklow is probably less precarious than in other counties but ultimately much will depend on the overall strategy adopted by the government in relation to the network.

Personal security and concerns about the security of personal property are increasingly an issue that affects the quality of many people's lives. While the issue is relevant to all almost all age groups it is particularly important for elderly people especially those living alone. There are 16 Garda stations dispersed throughout the county (Map 65). The stations are

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¹¹ Review of Sub Post Office Network, Report prepared for Minister for Public Enterprise, 2001

linked to Garda Administrative regions, with Wicklow shared between three regions. The Gardaí have a very important role in monitoring and managing traffic movements, especially in relation to traffic accidents. Between 1990 and 1997 there was a steady increase from 114 to 244 in the number of persons injured in traffic accidents on roads in Wicklow. Since then the number has declined to 184 in 1999. For the period 1990-99 the average number of fatalities on Wicklow roads was 11.4 but for the final two years the number increased to 15 (Map 66). 12.

Fire fighting is another important safety service provided by the Local Authority. There are ten fire stations at strategic locations throughout the county (<u>Map 67</u>) in order to ensure that most of the population can be reached within twenty minutes of a station being notified.

6.5 Recreation and leisure facilities

The availability of recreational and leisure facilities can enhance the quality of life that people may experience in different parts of the county. Almost every village throughout the county has facilities for some field-based sports. In addition there are twelve equestrian facilities and eight golf courses (see Map 43) as well as walking routes (The Wicklow Way) and for swimmers there are extensive beaches at accessible locations along the east coast (especially Brittas Bay). Public swimming pools are also available in Arklow and Wicklow town.

6.6 Parity of access to information

As society has become more educated there are increasing demands for access to information in a variety of formats. In order to cater for increasing numbers of readers there is a need for a well-resourced and accessible library service. Wicklow County Council supports the county public library service from its library headquarters in Bray. There are 12 branches throughout the county, <u>Map 67</u>. All branches provide internet access with particularly good facilities in Bray, Greystones and Baltinglass.

7. SUPPORTING INFRASTRUCTURE

This section provides an overview of the current position in relation to some key items of physical infrastructure that are necessary to support development in county Wicklow.

7.1 Transport

7.1.1 Roads

The principal transport route in County Wicklow is the N11 that runs from north to south for approximately 66 km (41 miles) through the eastern corridor. The National Secondary route N81 extends southwards in the west of the county linking Blessington and Baltinglass. In addition to the National roads there are 394.3 kms (245 miles) of Regional roads, and 1,494 kms (928 miles) of Local (County) roads (Map 66).

The growth of population and especially the increase in the number of vehicles on the roads has in many areas created severe pressures on the roads infrastructure. For example, the number of new cars registered increased from 2,909 in 1996 to 4,805 in 1999 and 6,471 in

¹² data provided by Wicklow County Council

2000. In order to cater for increased traffic volumes and to reduce the number of traffic accidents several road improvement projects are already underway while others are planned. A schedule of major projects is summarised in Table 19.

Table 19: Current and future road improvement projects in Wicklow

Project	Progress		
Current N11 Works			
Kilmacanogue to Glen of the Downs	To be completed 2003		
Newtownmountkennedy to Ballynabarney	Construction to start early 2001 with completion 2003		
Ballynabarney to Arklow	Construction to start 2003 and completed by 2005		
Willow Grove Interchange	Construction to start 2001 and completed by 22002		
Future N11 Works			
Third Interchange of Arklow By-Pass	Anticipated that it will not be required until 2010		
Newtownmountkennedy By-Pass	Northern interchange may need to be improved to give increased capacity		
Killarney Road/Fassaroe Interchanges	Both of these under capacity. Major new Business park planned here which will include upgrading these		
Future Projects Off the N11			
Wicklow Town Ring Road	Purpose to ease traffic congestion in Wicklow Town with easier access to port and to ease traffic on the Rathnew/Wicklow Road		
Greystones link with Willow Grove Interchange	Improved road to Greystones from the Willow Grove Interchange		
Kilcoole to Ballyranan Interchange	Proposed link road from Garden Village down towards Druids Glen		
N81 Project			
Hempstown to Tinode	Upgrading of existing network to improve safety and capacity		

Source: Wicklow County Council

7.1.2 Rail and Bus Services

In order to comply with the principles of sustainable development there will more emphasis in the future on the use of public transport, especially for journeys to work. At present rail services are provided by larnród Éireann while Bus Átha Cliath and Bus Éireann provide public bus services. An overview of the existing and proposed services by larnród Éireann is provided in Table 20.

Table 20: Existing and proposed public rail transport services

Existing Scenario	Proposed Scenario
Existing railway runs from Bray to South Arklow, a	
distance of c. 40 miles	
Stations served are Bray, Greystones, Kilcoole,	There are no plans for new stations along the
Wicklow, Rathdrum & Arklow	route
The line is electrified between Bray and Greystones	
Remainder of line from Greystones to Arklow has	It is proposed to renew all the older track over
old jointed track on timber sleepers and mechanical	the next 3 years along this line and upgrade
signaling	the signaling
There is one commuter service each day between	
Arklow and Dublin	
In addition, there are 3 intercity services each way	
daily between Dublin and Rosslare which serves all	
stations	
Arklow Train comprises of 5/6 carriages, which will	
be replaced shortly by diesel railcars. There are	
two intercity trains on the route, each 7/8 carriages	This is a Common to the common DADT
There are 4 peak hour DART services to	This will be increased when the new DART
Greystones	carriages become available. A half hourly off-
DART consisce are provided by the current DART	peak service will be provided
DART services are provided by the current DART fleet of 80 carriages	
All rolling stock, with the exception of the Arklow	The Arklow Commuter train will be replaced as
Commuter train are accessible to persons with	indicated above by diesel railcars which will be
disabilities.	accessible to persons with disabilities
larnród Éireann have produced a booklet on the	accession to persone with disabilities
accessibility of their stations for their Mobility	
Impaired Passengers. This is available in the	
offices of the DC&E	
The Dart line has now been extended to	There are no future plans to extend the DART
Greystones	to Wicklow town and no part of the LRT will
	reach Wicklow

Bus Átha Cliath currently has 40 buses per day operating in the county on a Monday to Friday basis. Details on the services provided by Bus Éireann are summarized in Table 21 while the routes, numbers of runs and frequency of services provided by Bus Átha Cliath are contained in Table 22 and *Map 68*.

Table 21: Bus Éireann services in Co. Wicklow

Bus Route	Service Frequency
Dublin – Rosslare via Wicklow & Arklow	10 services daily in each direction
Dublin – Waterford via Blessington & Baltinglass	4 services daily (Mon – Sat) in each direction.
	2 services daily (Sunday) in each direction
Dublin – Wicklow via Rathnew & Ashford	15 services daily (Mon – Sat) in each direction.
	7 services daily (Sunday) in each direction

Table 22: Bus Átha Cliath Service levels in County Wicklow

Bus No.	Route	No. of Buses	No. of Runs	Frequency of Service	
45	Bray to City Centre	11	105 runs Monday - Friday	25 minute freq.	
45A	Bray to Dunlaoghaire	4	64 runs Monday – Friday	25 minute freq.	
84	Newcastle/ Kilcoole/Bray to City Centre	6	50 runs Monday – Friday	1 hour freq. on average	
84X	Kilcoole/Bray to City Centre Express Service	2	6 runs Monday – Friday	Peak Hours only	
145	Local Service in Bray serving Palermo, Ballywaltrim, Kilmacanogue and Bray Station	6	224 runs Monday – Friday	12 minute freq. on average	
146	Local Service in Bray, serving Ballywaltrim and Bray Station via Boggle Road		26 runs Monday – Friday	40 minute freq	
184	Newtownmountkennedy, Kilpedder, Greystones to Bray	4	82 runs Monday – Friday	40 minute freq.	
185	Shopriver, Powerscourt, Enniskerry, Fassaroe to Bray station		40 runs	1 hour freq	

7.1.3 Sea transport

Arklow Port and Wicklow Harbour are significant components of the county transport infrastructure endowment. Arklow port has four working berths and is unusual amongst east coast ports in having a small tidal range. The maximum size vessels that can use the port are 3,000 dwt. A report prepared for the Department of the Marine and Natural Resources in 1999 noted that there has been a significant decline in the export of timber products through Arklow port and that there were no grain or peat moss exports between 1994 and 1997. On the other hand, fertiliser exports have increased but the port activities are inordinately reliant on a single commercial company in this sector. The port has an on-going dredging problem and at the same time the quay walls are crumbling and the two piers require capital refurbishment.

Wicklow port has a stable import trade, with timber being the principal import commodity. There are opportunities for a recommencement of exports of stone and aggregates. There is room for additional berth capacity that would support an increase of about one-third over and above its existing trade levels. In addition to its role as a commercial port the harbour also caters for fishing, leisure and recreational activities.

7.2 Environmental Infrastructures

The main items of environmental infrastructure relate to water and sewerage treatment, and waste management. In relation to water and sewerage treatment there is need for considerable investment in order to cater for the needs of increasing population and the

demands of industrial development. In 1999 Wicklow County Council prepared a Sanitary Services Needs Study. As a result eight Water Supply Schemes and six sewerage schemes have been given highest priority for funding and implementation. These are summarised in Table 23.

Table 23: Prioritised Water Supply and Sewerage Schemes in county Wicklow

No.	Water Supply Scheme	Description	Estimated Cost (£m)	Start Date
1	Arklow water supply Scheme	New source reservoir and treatment	6	2000
2	West Wicklow Water supply Scheme, Phase 1	Provision of source and storage in Blessington area	8	2000
3	Enniskerry water Supply Scheme	Augment supply & storage	1.5	2000
4	Newtown Water Supply Scheme	Provide storage & distribution	2.5	2000
5	Bray water Supply Scheme	Provide storage to North Town Area and strengthen distribution	10	2000
6	Wicklow town Water supply Scheme	Augment storage and extend area	8	2002
7	West Wicklow Water Supply Scheme Phase 2	Rationalise and improve supply in Baltinglass district	7	2002
8	South West Wicklow Water Supply Scheme	Provide ware to rural areas in South West Wicklow	3	
	Sewerage Schemes			
1	Arklow sewerage	New treatment plant and sea outfall	15	2000
2	Wicklow Town secondary sewerage treatment	New treatment plant and incorporation of Rathnew and Ashford	18	2000
3	Newtownmountkennedy Sewerage Scheme	Regional Scheme serving Newtown, Kilcoole and district	25	2001
4	Rathdrum Sewerage Scheme	New treatment plant and collection system	3	2000
5	Blessington Sewerage Scheme	Extension to treatment plant	1.5	1999
6	Bray Sewerage Scheme	Secondary Treatment	40	2001

Source: Wicklow County Council Major Water and Sewerage Schemes Programme Report, March 2001.

7.3 Electricity

The very rapid growth of the economy over recent years has resulted in very significant increases in the demand for electricity, which has considerable pressures on the generating stations and the transmission and distribution networks. As a result there are a number of areas in the country that urgently require additional major developments. This could potentially be a serious constraint on further manufacturing and service industry development over the medium term, until such time as additional capacity is made available locally (Map 69).

The ongoing economic development in the county and new customer loads will require additional supplies especially in the east of the county. At present there is a network of 18 electricity supply stations. Apart form providing new or expanding existing stations it may be

necessary to install new high voltage distribution lines. In some areas of the country there has been local opposition to such infrastructure. Therefore, careful planning based on provision of information and a structure for consultation may be required.

7.4 Natural Gas

Natural gas is the cleanest and most environmentally friendly of all fossil fuels. Following the discovery of a major natural gas reserve off Kinsale in the early 1970s and the eventual construction of a pipeline to Dublin and further north there has been a very large increase in the consumption of gas for electricity generation and also for residential and industrial heating and other uses. As demand increased the Kinsale gas supply was augmented by imports via a pipeline system from Scotland. A second interconnector pipeline was put in place in 2000 that will bring additional supplies ashore at Ballough in north Dublin from which a new pipeline will be laid to Galway and from there to the Shannon Estuary. It will also be able to take gas from the Corrib Gas Field.

Bord Gais has extended the supply of natural gas from Bray to link with Greystones, Delgany, Kilcoole, Newtownmountkennedy and Blessington. The link will also include Rathnew, Arklow and Wicklow. It is anticipated that in 2000 four fifths of all houses will use gas and all new housing developments will be within the area supplied with natural gas (Map 70).

7.5 Information Technology

Ireland has moved very rapidly into the Information Technology Age. The new information and communication technologies are very rapidly bringing about very significant changes in the nature of work, the types of economic activities undertaken in Ireland, the competitiveness of businesses, as well as having a major influence on individual lifestyles and especially on opportunities for independently pursuing lifelong learning. Central to the successful and widespread adoption of the new technologies are the provision of appropriate hardware and also the skills to maximise the potential that is offered. Much of the responsibility for providing the appropriate and for promoting the new technologies lies within the domain of the education system.

The main hardware requirements are the provision of high-speed communication lines. The provision of this infrastructure will be undertaken on a competitive basis by a number of privately owned commercial companies. The geographical pattern of provision to date (<u>Map</u> <u>71</u>) suggests that there is a major risk of a digital divide emerging. The most likely scenario is that the fibre optic cables will be provided by the private companies in those areas where there are potentially large numbers of customers at high densities. (Also <u>Map</u> <u>72</u>)

In Wicklow a fibre cable runs south along the east coast. There is a Frame Relay node in Arklow that provides access to the National Frame Network and a 384 ISDN backup. All exchanges in the county are now digital (Map 73) and therefore capable of providing ISDN lines. Eircom have indicated that they can provide purpose built solutions to the network requirements of their customers.

8. SYNTHESIS

This section provides a synthesis of the spatial patterns that have been examined separately throughout the previous sections. The discussion is organised around a summary map that has been produced following an analysis of 30 socio economic and demographic indices for each of the rural DEDs in Ireland¹³. The analysis was undertaken for the National Spatial Strategy and the resultant map provides a basis for establishing the wider context which the Wicklow CDB strategy needs to take account of.

Using a two-stage approach to the analysis, the interrelationships between the indicators measured across all of the DEDs have been identified and used to produce composite indicators which are then used as a basis to classify each of the DEDs into six rural 'area types'.

8.1 The Indicators

The analysis was based on indicators selected to measure the following aspects of the rural socio-economic structure:

- 1. Demographic structure (6 indicators)
- 2. Labour force characteristics (8 indicators)
- 3. Education and social classes (3* indicators)
- 4. Sectoral employment profiles (5 indicators)
- 5. Structure /strength of agriculture (3 indicators)
- 6. Changes in demography and labour force (5 indicators)

*Only three indicators were selected to measure the education levels and distribution by social classes as these indicators are strongly correlated with some of the others.

8.2 The summary map of area types

The map shows the distribution of six types of rural areas. The urban areas that were excluded from the analysis form a seventh category (Map 74). This map need to be viewed in conjunction with Maps 12 and 56 (settlement pattern and landscape zones) The rural area types have been given the following summary labels.

- 1. Peri-urban areas
- 2. Very strong rural areas
- 3. Strong agricultural areas undergoing adjustment
- 4. Structurally weak rural areas
- 5. Marginal areas
- 6. Highly diversified rural areas

The distribution of population by area type (including Urban areas) for Wicklow and adjoining counties is shown in Table 24. A brief description of each area type follows.

¹³ Report on Irish Rural Structure and Gaeltacht Areas prepared for Spatial Planning Unit, Department of the Environment and Local Government by Fitzpatrick Associates and NIRSA NUI Maynooth.

8.2.1. Peri-urban areas

These areas are generally characterized by high population densities, an advanced level of transition to a higher socio-economic profile (higher proportions with advanced levels of education, larger shares of the workforce in professional services and commerce functions), low levels of reliance on agricultural employment and high levels of commuting to work. They are generally found in close proximity to urban centres and are particularly evident around the larger towns and cities. The peri-urban parts are essentially those parts of the open countryside that have been subjected to very high levels of urban generated adjustment, they contain approximately one-tenth of the population of the county.

Table 24: Percentage distribution of population by area type 1996

Area Type	Meath	Kildare	Wicklow	Ireland
Urban	46.2	65.7	64.8	60.7
Peri-urban	20.1	11.7	10.6	22.2
Very strong rural	29.4	20.2	12.9	10.4
Strong agricultural	0.8	0.8	3.9	16.2
Structurally weak	3.2	0.1	0.7	6.3
Marginal	0.0	0.4	0.4	3.0
Highly diversified	0.3	1.0	6.7	2.5

8.2.2. Very strong rural areas

These areas are very prominent throughout the rural parts of the Mid-East and much of the Southeast. As well as possessing a strong agricultural base DEDs that constitute this cluster also exhibit an above average level of transition to non-agricultural employment. The rate of population increase in this Area Type is often higher than in the peri-urban areas and is reflected in a more youthful population. This suggests that some parts of this Area Type are experiencing the demographic and labour force effects associated with the recent increases in long distance commuting. In Wicklow this area type, which accounts for almost 13% of the population, is most evident in the south, especially the southeast.

8.2.3. Strong agricultural areas undergoing adjustment

The type of rural area is represented by DEDs that are mostly concentrated in the southwest of the county. In the wider national context these areas have a strong agricultural base due to a combination of larger farms with an orientation towards either dairying or tillage. Full-time rather than part-time farming is more the norm. Female labour force participation rates are below average and throughout all of these areas the rate of employment growth between 1991-96 was exceptionally low. Following the introduction of restrictions on agricultural output as part of the CAP reforms in the 1990s the opportunities for further expansion have become severely restricted.

8.2.4 & 8.2.5 Weak rural areas

These two area types represent the rural DEDs that are economically and demographically most disadvantaged. The defining attributes are a strong reliance on a very weak farm structure (elderly farmers on small farms producing very low levels of output, high level of decline in number of farmers, though they still account for the largest share of the workforce), low levels of employment in manufacturing or services and a below average level of self-employment outside agriculture, and the lowest level of females in part-time employment. These economic attributes have contributed to the emergence of a very weak demographic

profile based on an ageing population with relatively fewer households with young children. This area type is associated with only a few DEDs in the southwest.

8.2.6 Highly diversified rural areas

This area type includes almost seven percent of the total population of the county. This type of area is usually associated with scenic and high amenity landscapes that attract large numbers of tourists and support a distinctive socio-economic profile. This type of area has emerged as having higher levels of self-employment outside of agriculture and higher levels of part-time work especially for women, though the share of employment in manufacturing tends to be very small. The demographic structure is typical of areas experiencing some net in-migration of persons aged over 25. In Wicklow these characteristics are mostly associated with the upland districts and part of the area between Wicklow town and Arklow.

In conclusion, this report has provided an overview of the economic, social, cultural and environmental dimensions of development in Wicklow while also outlining the current position in relation to factors that contribute to the quality of life throughout the county and the range of supporting infrastructures that are available. In the preparation of its strategy for economic, social and cultural development throughout the county the County Development Board will to take account of the trends and spatial patterns described here. The strategy will need to contain proposals for co-ordinated and integrated responses that will lead to development that will be economically, socially, culturally and environmentally sustainable and at the same time contribute to an enhancement of the quality of life of all residents while also maximising the contribution of Wicklow to the development of the state.

9. SUMMARY

County Wicklow occupies an area of 2,017 square kilometers with an estimated population of approximately 116,300 in 2001. The geographical position of the county is an important contextual factor in any assessment of recent development trends and future prospects. The county is part of the Greater Dublin Area and is, therefore, subject to many of the pressures emanating from the expansion of the capital city.

The typical topography in Wicklow is one of mountains, rolling foothills, forests, coastline, and lakes with attractive views and prospects. The county is dominated by the Wicklow Mountains. With the exception of a narrow coastal strip and some low ground in the south, most of county Wicklow lies above the 200 metre contour line and over one third lies abobe the 300 metre line.

Recent patterns of development have been very much influenced by the location of key items of infrastructure and the settlement pattern that has evolved over centuries. In recent times the dominant influence has been the extent of commuting that has resulted from the overspill of Dublin. The principal towns are located along the east coast with a second linear arrangement of smaller centres in the west. The principal transport routes are the N11 in the east and the N81 in the west. East-west movement is severely restricted by the mountains so that most traffic has to take either the R756 or the R759.

The average level of per capita disposable income in 1998 was equal to 93% of the State average, and seventh highest among all counties. The average level of GVA per capita in 1995, the latest year for which data are available by county, was equivalent to 80% of the State average, and twelfth highest among all counties. A major challenge for the future will be to increase the level of wealth creation and employment opportunities within Wicklow.

Wicklow has one of the fastest growing populations, resulting in considerable development pressures especially in the north and east of the county. In some remoter rural areas the population has been depleted by out-migration over a long period. Recent population projections suggest that an increase of up 35% (about 36,300 persons) in the total may be expected between 1996 and 2011. Furthermore, it is expected that up to 40% of the increase will occur in and around Bray, Greystones and Enniskerry. Such a high level of population growth in parts of the county will pose significant challenges in relation to the provision of economic and social infrastructure in a coordinated and timely manner, and also in relation to ensuring that development will be sustainable in relation to the environment, society and the economy.

The demographic trends over the 1980s has resulted in age profiles that vary throughout the county giving rise to demands for different types of services. In some of the remoter rural parts there is a high elderly component, some of whom may experience difficulty in accessing the caring and retail services. One quarter of those aged over 65 in 1996 were living alone. In the expanding areas there is a need to provide amenities and facilities to cater for the more youthful populations. Another component of the populations of the more youthful areas is a relatively high concentration of lone parent families with young children. These families may experience problems in relation to housing and the parents may require assistance in order to complete their formal education or to gain employment. There is an increasing demand for childcare facilities in both urban and rural areas. A number of rural areas are particularly poorly served in relation to childcare facilities.

The overall labour force participation rate in Wicklow is equal to the national average but less than in neighbouring counties mainly due to a lower rate for females. The service sector is by far the largest employment area accounting for almost three quarter of all workers in 1996. It is also the fastest growing area. However, not all of the service employment is located in Wicklow. The Census of Population classify persons by place of residence rather than place of work. Undoubtedly a very significant share of the Wicklow workforce are employed in Dublin. Primary activities (agriculture and forestry) remain the most important source of employment in some of the rural areas. For many of these households the prospects of improving their real incomes and material standard of living are becoming more limited.

There has been a very significant decline in unemployment over recent years in line with the national trend. Nevertheless, there were still 3,568 persons on the Live Register in April 2001, of whom 31.6% were unemployed for more than one year. By far the largest concentrations are in Bray, Wicklow town and Arklow. In response to the severity of the problems in Bray the town has been included in the RAPID programme which will provide additional funding for health, education, housing, childcare, sporting facilities, youth development, anti-drugs measures and policing.

The main economic challenges are to diversify the economic base towards high productivity sub-sectors in manufacturing and internationally traded services that provide high quality well paid employment. There is a need to improve the competitiveness and added value of output from the more traditional sectors by encouraging a greater emphasis on quality, marketing, innovation and better management. The skills of the labour force can also be enhanced by closer collaboration between all agencies involved in the provision of education and training programmes.

The changing demographic and economic profiles are contributing to the consolidation of significant patterns of social class segregation across the county. Social segregation at the micro level, especially within the urban centres, is due in part to previous housing policies. The recently prepared Housing Strategy which takes account of the provisions of the Planning and Development Act 2000 will provide a framework for addressing this issue.

There are a number of strong community based organisations and partnerships throughout the county, who have been successful in introducing innovative projects and programmes in both rural and urban areas.

Wicklow has a very distinctive and very beautiful landscape and natural environment and also a rich cultural heritage. While these features are a tremendous resource for recreation and leisure activities and also for tourism they need to be protected and carefully managed so that future generations can enjoy the resources that we have inherited from the past. A number of agencies have a key role in this respect, especially Wicklow County Council, Duchas and the Environmental Protection Agency. There is a need for on-going awareness raising programmes and for fostering a culture of compliance with, and enforcement of, environmental regulations. Careful management of the cultural heritage resources is also required in order to cater for the very large numbers of visitors.

A number of summary health indicators suggest that the overall situation in Wicklow compares favourably with other counties. Specialised health care services are provided from hospitals located outside Wicklow. Within the county there is a network of day-care centres.

There are plans for significant improvements and the provision of new infrastructure such as roads, water and sanitary services. A number of projects are already underway. When completed these projects will improve access, increase road safety, and very significantly shape the future settlement pattern in the county as well as the distribution of economic activity and services. A key item of new infrastructure will be the provision of appropriate hardware to enable the opportunities offered by information and communications technologies to be fully exploited. A strategic approach will be required in order to ensure that a new divide based on digital access does not occur.

In conclusion, this report has provided an overview of the economic, social, cultural and environmental dimensions of development in Wicklow while also outlining the current position in relation to factors that contribute to the quality of life throughout the county and the range of supporting infrastructures that are available. In the preparation of its strategy for economic, social and cultural development throughout the county the County Development Board will need to adopt an approach that promotes integration and coordination among all of the service providers in relation to the economic, social, cultural and environmental aspects of development. It will also need to take account of the spatial context in terms of how Wicklow relates to the wider region and also in relation to the physical and socio-economic spatial patterns within the county.