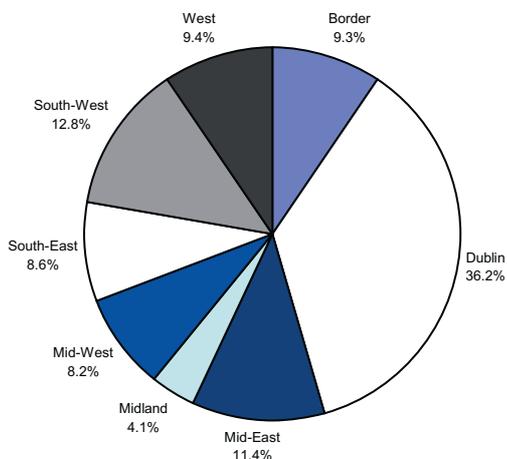


Table 1 Actual and projected population of Regional Authority² areas (M1F2)

Region	Population 1996	Natural Increase	Internal Migration	External Migration	Population 2031	% Increase
Thousands						
Border	407.3	34.7	-34.4	19.2	426.6	4.7
Dublin	1,058.3	315.4	71.9	205.2	1,650.8	56.0
Mid-East	347.4	81.2	68.6	22.9	520.0	49.7
Midland	205.5	14.8	-35.9	1.1	185.2	-9.9
Mid-West	317.1	53.1	-8.9	14.1	375.1	18.3
South-East	391.5	20.7	-24.3	6.5	394.3	0.7
South-West	546.6	58.9	-28.0	8.2	585.7	7.2
West	352.4	37.4	-8.9	47.9	428.7	21.7
State	3,626.1	616.2	0.0	325.0	4,566.6	25.9

Figure 2 Population shares of Regional Authority areas, 2031 (M1F2)



Regional population shares

In 1961, when the population of the State was at its lowest level (2.8 million), Dublin accounted for just over a quarter of the total population while the share of the Mid-East region was 6.7 per cent. By 1996 Dublin had increased its share to 29.2 per cent while the Mid-East represented 9.6 per cent of the total. All other regions lost population share over the same 35-year period.

Under the M1F2 projection scenario, Dublin and the Mid-East are projected to further increase their population shares. By 2031 Dublin will contain 36.2 per cent of the population of the State while the Mid-East will account for 11.4 per cent. All other regions are projected to show further decreases in their regional population shares.

Age structure

The young population (those aged 0-14 years) will increase by over a fifth in the Dublin region over the 35-year period covered by the projections, due to rising births. However, in all other regions there will be fewer younger persons in 2031 compared with 1996. The decline will be most pronounced in the Midland region (-44.5%), while in the Mid-East it will only be slight (-1%). The results in all regions are affected by the assumed declines in the total fertility rate as well as the number of women of childbearing age in these regions.

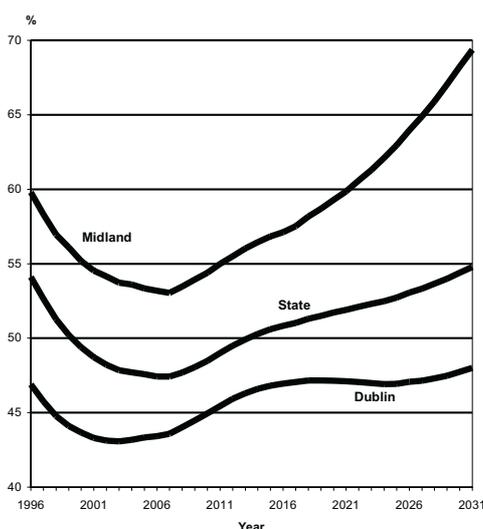
If recent patterns in inter-regional and international migration persist, then Dublin and the Mid-East will see major increases in their populations aged 25 to 64. In particular the number of persons aged 45 to 64 will more than double in both locations in the 35-year period to 2031. The Midlands will be the only region to experience a decline in the number of persons aged 25 to 64 over the projection period, reflecting both its current age structure and a continuation of the inter-regional migration patterns experienced in the recent past.

The number of old persons (65 years and over) will increase in every region between 1996 and 2031 with the most marked increases being in the Mid-East (+211.4%) and Dublin (+140.5%). The very old population (those aged 80 years and over) is projected to double by the year 2031. In the Mid-East it is projected to be over 3 times its 1996 level.

The young dependency ratio (those aged 0-14 as a percentage of those aged 15-64) will decline in all regions while the old dependency ratio (those aged 65 years and over as a percentage of those aged 15-64) will show the opposite trend. The sum of the two ratios (the total dependency ratio) will fall and then rise over the period 1996 to 2031.

While the young dependency ratio is projected to converge to a fairly uniform level throughout the regions, there are large variations in the projected old dependency ratio. In particular, the Midland region can expect a projected old dependency ratio of 43.0 per cent in 2031 compared with 22.7 per cent in Dublin and 28.5 per cent in the Mid-East. The Dublin region (48%) will have the lowest total dependency ratio in 2031 under the M1F2 scenario while the Midland region (69.4%) will have the highest.

Figure 3 Projected total dependency ratios, 1996 to 2031 (M1F2)



Average age

The population of the State is projected to age on average by about 7½ years over the course of the 35-year period 1996 to 2031. In 1996 the Mid-East (32.3 years) had the youngest population on average while the oldest was the West (35.3 years). By 2031 the Dublin region (39.7 years) will have the youngest age profile while the Midlands (45.4 years) will have the oldest.

Table 2 Average age in Regional Authority areas, 1996 and 2031 (M1F2)

	Persons		Males		Females	
	1996	2031	1996	2031	1996	2031
Border	34.7	43.3	34.0	42.1	35.5	44.4
Dublin	33.6	39.7	32.2	38.4	34.8	40.8
Mid-East	32.3	41.5	31.5	40.4	33.1	42.6
Midland	34.1	45.4	33.4	43.9	34.7	47.0
Mid-West	34.3	41.4	33.5	40.0	35.1	42.9
South-East	34.3	44.9	33.5	43.2	35.1	46.6
South-West	34.6	43.0	33.7	41.6	35.5	44.3
West	35.3	42.1	34.7	40.9	36.0	43.2
State	34.1	41.7	33.1	40.4	35.0	42.9

The dual effect of more male than female births and higher female life expectancy results in a higher average age for females. In 1996 the differential was 1.9 years while in 2031 it is projected to be 2.5. The female excess is projected to be highest in the case of the South-East (3.4 years) and lowest in the case of the Mid-East (2.2 years).

Births

The number of births in a particular period is a function of the number of women of child-bearing age (15-49 years) and the fertility levels of these women. Given that approximately 90 per cent of births are to women aged 20-39 years, the focus will be on this age group.

At the national level the number of women aged 20-39 increased by over 70 per cent in the 35-year period 1961-1996 (*Table 3*). However, over the same period the total fertility rate declined from 3.76 to 1.89 (having reached a peak of over 4 in the mid-1960s). The combined effect was a decline in the number of births from just under 60,000 in 1961 to 50,000 in 1996. The same broad trend was in evidence in all Regional Authority areas apart from the Mid-East, where the increase of over 150 per cent in the number of women aged 20-39 more than offset falling fertility rates to give an increase in the absolute number of births.

Under the M1F2 scenario the number of births at national level is projected to decline from its 1996 level of 50,400 to 47,100 by 2031. The main cause is the assumed decline in fertility to 1.75, as the number of women aged 20-39 is projected to change very little over the 35-year period. Dublin and the Mid-East are the only regions projected to show increases in the number of births between 1996 and 2031. These two regions combined will account for 52.2 per cent of all births by the end of the projection period, up from 40.3 per cent in 1996.

Figure 4 Actual and projected births (M1F2)

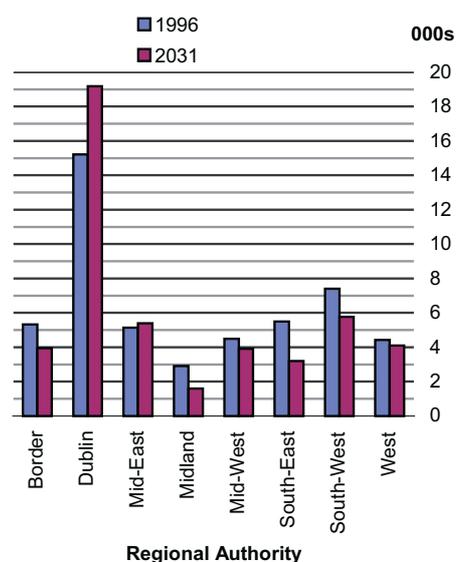


Table 3 Females aged 20-39 and total births, 1961, 1996 and 2031 (M1F2)

Regional Authority area	Females aged 20-39			Births		
	1961	1996	2031	1961	1996	2031
	Thousands					
Border	36.5	53.4	43.3	7.0	5.3	3.9
Dublin	102.1	184.2	236.6	17.4	15.2	19.2
Mid-East	20.0	51.0	58.7	4.1	5.1	5.4
Midland	18.2	27.0	14.3	4.0	2.9	1.6
Mid-West	26.4	43.7	39.3	5.5	4.5	3.9
South-East	32.9	53.3	34.5	6.9	5.5	3.2
South-West	47.8	77.6	63.3	9.1	7.4	5.8
West	29.5	46.4	48.4	5.9	4.4	4.1
State	313.4	536.6	538.4	59.8	50.4	47.1

Deaths

The mortality assumptions at national level envisage a decrease in mortality rates consistent with increases in life expectancy at birth of 4.8 years for males and 5.3 years for females between 1996 and 2031. Because of similarities in regional mortality rates, the national assumptions have been applied uniformly at regional level. Differential age structural effects will, therefore, largely dictate changes in the number of deaths projected over the 1996-2031 period.

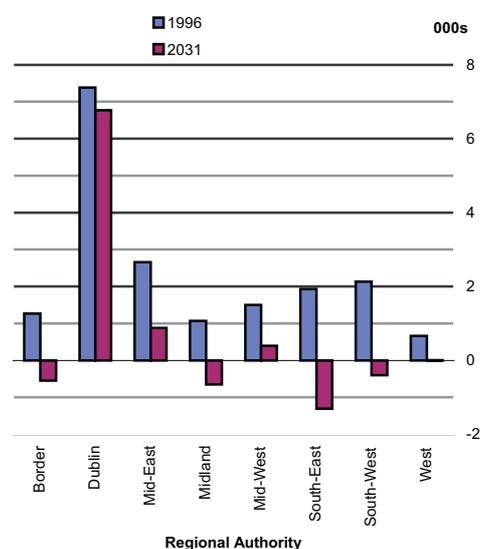
Given that in 1996, 4 out of 5 deaths were to persons aged 65 years and over, any changes in the numbers in this age group will be likely to impact on the projected number of deaths. At national level the period 1996-2031 will see the population aged 65 years and over more than doubling, regardless of the combination of assumptions chosen. The number of deaths, however, is projected to increase more modestly (+32%) because of assumed decreases in mortality rates.

All regions will have more deaths in 2031 than in 1996 under the M1F2 scenario (Table 4). The increase will be most pronounced in Dublin and the Mid-East, commensurate with the projected increase in the old population in these regions.

Table 4 Old population and total deaths, 1961, 1996 and 2031 (M1F2)

Regional Authority area	Persons aged 65+			Deaths		
	1961	1996	2031	1961	1996	2031
	Thousands					
Border	48.3	53.6	90.8	5.1	4.1	4.5
Dublin	59.9	105.2	253.0	7.3	7.8	12.4
Mid-East	18.4	30.7	95.6	2.2	2.5	4.5
Midland	21.2	25.0	47.0	2.2	1.8	2.2
Mid-West	30.8	37.5	70.8	3.5	3.0	3.5
South-East	36.9	46.6	92.7	4.2	3.6	4.5
South-West	54.0	66.1	125.8	6.0	5.3	6.2
West	45.5	49.2	83.1	4.4	3.8	4.1
State	315.1	413.9	858.8	34.8	31.8	42.0

Figure 5 Actual and projected natural increase (M1F2)



Natural increase

There were more births than deaths in each of the regions in 1996. However, this excess is projected to decline in all regions in the period to 2031. By the end of the projection period Dublin, the Mid-East and the Mid-West will be the only regions in which the number of births will exceed the number of deaths.

NUTS2 level

There are two NUTS2 regions – the Border, Midlands and West (BMW) and the remaining Regional Authority areas combined, termed the South and East (S+E). For the purposes of the present analysis the South and East is further sub-divided into the Greater Dublin Area (GDA) – comprising Dublin and the Mid-East - and the remainder of the South and East (S+E rem).

Under the M1F2 scenario the population of the BMW region is projected to increase by 7.8 per cent between 1996 and 2031 to reach a figure of 1,040,500. The population of the S+E region is projected to grow by nearly a third over the same period to over 3½ million by 2031. The GDA region will provide most of the growth, with its population projected to increase by 54.4 per cent during the 35-year period. The remainder of the S+E will record a more modest 8 per cent growth, almost identical to the rate projected for the BMW region.

Table 5 Actual and projected population of NUTS2 regions (M1F2)

NUTS2 region	Population 1996	Natural increase	Internal migration	External migration	Population 2031	% change
Thousands						
BMW	965.2	86.8	-79.3	68.2	1,040.5	7.8
S+E	2,660.9	529.3	79.3	256.8	3,526.0	32.5
<i>GDA</i>	<i>1,405.7</i>	<i>396.6</i>	<i>140.5</i>	<i>228.1</i>	<i>2,170.8</i>	<i>54.4</i>
<i>S+E rem</i>	<i>1,255.2</i>	<i>132.7</i>	<i>-61.2</i>	<i>28.7</i>	<i>1,355.2</i>	<i>8.0</i>
Total	3,626.1	616.2	0.0	325.0	4,566.6	25.9

The projected increase of 75,300 in the population of the BMW region will comprise a natural increase of 86,800 and a loss of 11,100 through migration. In the case of the latter, a gain of 68,200 through international migration will be more than offset by a loss of 79,300 through internal migration to the S+E region. The S+E region will record a natural increase of more than a ½ million between 1996 and 2031. This will be supplemented by an increase of over a ¼ million net immigrants from abroad. Nearly three quarters of the natural increase in the S+E region will arise in the Greater Dublin Area which is also projected to show gains from internal migration (+140,500) and net immigrants from abroad (+228,100).

The remainder of the S+E region is projected to show a natural increase in population of 132,700 while net immigration (+28,700) will not be sufficient to counteract a projected loss of 61,200 through internal movements of population to elsewhere in the State.

At the end of the projection period the BMW region will see its population share decline to 22.8 per cent under the M1F2 scenario from 26.6 per cent in 1996. The GDA will account for 47.5 per cent of the population of the State in 2031 compared with 38.8 per cent in 1996.

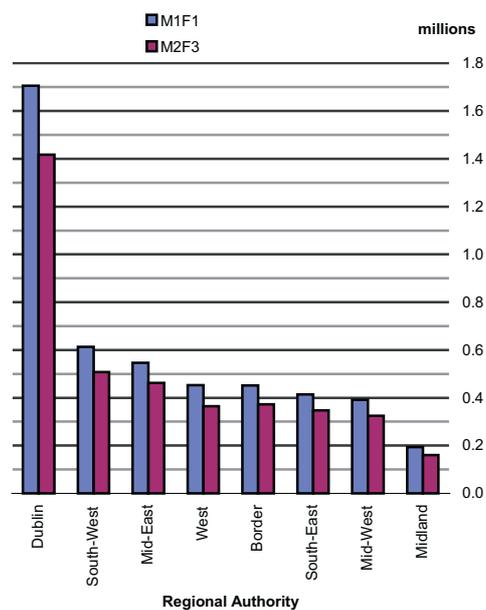
Table 6 Actual and projected population of Regional Authority areas, 1961- 2031

Year	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West	State
Thousands									
Actual									
1961	371.9	718.3	188.0	180.1	260.7	319.9	446.9	332.4	2,818.3
1966	359.7	795.0	194.2	178.2	264.8	319.5	452.5	320.1	2,884.0
1971	360.8	852.2	210.0	178.9	269.8	328.6	465.7	312.3	2,978.2
1979	394.6	983.7	271.9	197.9	300.8	366.8	516.5	336.0	3,368.2
1981	401.8	1,003.2	287.0	202.1	308.2	374.6	525.2	341.3	3,443.4
1986	410.9	1,021.4	314.7	208.0	315.4	385.0	536.9	348.3	3,540.6
1991	403.0	1,025.3	325.3	203.0	310.7	383.2	532.3	343.0	3,525.7
1996	407.3	1,058.3	347.4	205.5	317.1	391.5	546.6	352.4	3,626.1
Projected									
M1F1									
2001	417.5	1,164.4	380.3	208.2	331.3	402.7	563.4	369.1	3,836.9
2006	428.4	1,274.1	413.7	210.4	346.4	412.7	580.5	387.2	4,053.3
2011	438.6	1,379.8	445.7	211.0	360.8	419.8	595.3	405.8	4,256.7
2016	446.3	1,470.8	474.6	209.5	372.4	423.3	606.2	421.8	4,424.9
2021	451.0	1,554.1	500.9	205.8	380.8	423.3	612.2	435.2	4,563.2
2026	452.3	1,631.1	524.3	200.1	386.3	420.0	613.7	445.3	4,673.1
2031	451.2	1,706.3	546.1	193.1	390.9	414.3	612.6	453.3	4,767.7
M1F2									
2001	417.3	1,163.2	380.1	208.0	331.0	402.4	563.0	368.9	3,833.9
2006	426.1	1,267.2	411.4	209.2	344.5	410.5	577.4	385.2	4,031.4
2011	432.2	1,364.2	439.3	208.4	356.2	414.1	587.7	399.6	4,201.8
2016	435.1	1,445.6	463.4	205.5	364.9	413.8	593.4	410.7	4,332.4
2021	435.3	1,519.5	485.0	200.5	370.6	410.3	594.8	419.5	4,435.5
2026	432.3	1,586.8	503.6	193.6	373.6	403.7	591.8	425.2	4,510.7
2031	426.6	1,650.8	520.0	185.2	375.1	394.3	585.7	428.7	4,566.6
M1F3									
2001	417.3	1,163.2	380.1	208.0	331.0	402.4	563.0	368.9	3,833.9
2006	424.8	1,262.9	410.1	208.6	343.4	409.3	575.6	384.0	4,018.8
2011	427.7	1,348.6	434.7	206.2	352.2	410.2	581.5	395.5	4,156.6
2016	426.9	1,416.0	454.8	201.5	357.5	406.7	582.1	402.9	4,248.4
2021	423.8	1,476.4	472.5	195.1	360.1	400.4	578.7	408.3	4,315.2
2026	417.6	1,530.1	487.3	186.8	360.2	391.2	571.4	411.0	4,355.5
2031	408.7	1,579.4	499.5	177.0	358.6	379.1	560.8	411.4	4,374.3
M2F1									
2001	415.3	1,154.1	378.1	207.3	329.4	400.8	560.3	366.1	3,811.3
2006	421.4	1,240.5	406.4	207.5	340.3	406.8	570.8	377.7	3,971.3
2011	426.1	1,319.9	432.7	205.8	349.8	409.4	578.2	388.7	4,110.6
2016	427.7	1,384.4	455.2	201.5	355.6	407.4	579.8	396.6	4,208.2
2021	425.8	1,439.7	474.5	194.7	357.8	401.6	575.9	401.5	4,271.6
2026	419.9	1,487.7	490.7	185.7	356.8	392.1	566.8	402.7	4,302.3
2031	411.2	1,532.4	504.8	175.1	354.2	379.7	554.5	401.4	4,313.2
M2F2									
2001	415.1	1,152.9	377.8	207.1	329.1	400.5	559.8	366.0	3,808.3
2006	419.1	1,233.7	404.1	206.4	338.4	404.7	567.8	375.7	3,950.0
2011	419.9	1,305.0	426.6	203.4	345.4	403.9	570.8	382.9	4,057.9
2016	417.0	1,360.7	444.5	197.7	348.5	398.4	567.7	386.3	4,120.7
2021	411.0	1,407.6	459.6	189.7	348.3	389.4	559.6	387.1	4,152.2
2026	401.4	1,446.9	471.4	179.7	345.0	376.9	546.6	384.6	4,152.3
2031	388.6	1,481.8	480.6	167.9	339.9	361.3	529.9	379.5	4,129.5
M2F3									
2001	415.1	1,152.9	377.8	207.1	329.1	400.5	559.8	366.0	3,808.3
2006	417.9	1,229.6	402.9	205.7	337.3	403.5	566.1	374.6	3,937.6
2011	415.7	1,290.1	422.1	201.2	341.5	400.1	564.9	379.0	4,014.7
2016	409.2	1,332.9	436.4	193.9	341.5	391.6	556.9	379.1	4,041.5
2021	400.1	1,367.6	447.8	184.6	338.5	380.0	544.6	376.9	4,040.2
2026	387.7	1,394.9	456.2	173.4	332.7	365.2	527.7	371.7	4,009.6
2031	372.2	1,416.9	461.6	160.5	324.9	347.3	507.2	364.1	3,954.6

Table 7 Projected population and dependency ratios for Regional Authority areas, 1996 – 2031 (M1F2)

	Population						Dependency ratios		
	0-14	15-24	25-44	45-64	65+	Total	Young	Old	Total
	Thousands						Percentage		
Border									
1996	101.0	67.2	105.9	79.6	53.6	407.3	40.0	21.2	61.2
2001	92.6	71.5	110.8	89.6	52.8	417.3	34.1	19.4	53.5
2006	89.0	65.7	118.0	99.8	53.5	426.1	31.4	18.9	50.3
2011	88.2	56.6	122.9	106.9	57.6	432.2	30.8	20.1	50.9
2016	85.6	52.7	121.5	109.6	65.6	435.1	30.1	23.1	53.3
2021	80.6	52.8	114.3	113.4	74.2	435.3	28.7	26.5	55.2
2026	74.5	51.6	103.3	119.8	83.1	432.3	27.1	30.3	57.4
2031	68.4	48.9	94.4	124.1	90.8	426.6	25.6	34.0	59.6
Dublin									
1996	232.7	197.2	321.0	202.2	105.2	1058.3	32.3	14.6	46.9
2001	237.4	203.0	377.1	231.6	114.0	1163.2	29.2	14.0	43.3
2006	257.4	187.4	432.6	263.5	126.2	1267.2	29.1	14.3	43.4
2011	283.1	177.4	463.9	296.6	143.2	1364.2	30.2	15.3	45.4
2016	295.0	185.9	469.5	328.3	166.9	1445.6	30.0	17.0	47.0
2021	294.2	205.1	450.8	377.0	192.3	1519.5	28.5	18.6	47.1
2026	287.0	217.9	435.2	425.9	220.9	1586.8	26.6	20.5	47.1
2031	282.5	221.1	441.7	452.5	253.0	1650.8	25.3	22.7	48.0
Mid-East									
1996	90.0	59.9	101.5	65.3	30.7	347.4	39.7	13.5	53.2
2001	88.7	63.6	113.9	80.9	33.0	380.1	34.3	12.8	47.1
2006	91.7	60.4	125.4	97.0	36.9	411.4	32.4	13.0	45.5
2011	95.3	55.7	133.2	110.0	45.0	439.3	31.9	15.1	47.0
2016	95.2	57.3	134.7	119.5	56.7	463.4	30.6	18.2	48.8
2021	93.0	61.1	131.1	130.5	69.3	485.0	28.8	21.5	50.3
2026	90.6	61.6	128.0	140.8	82.6	503.6	27.4	25.0	52.4
2031	89.1	60.4	127.0	148.0	95.6	520.0	26.6	28.5	55.1
Midland									
1996	51.9	34.3	55.2	39.1	25.0	205.5	40.3	19.5	59.8
2001	47.7	34.1	56.1	44.4	25.7	208.0	35.4	19.1	54.5
2006	46.3	29.7	56.4	50.4	26.4	209.2	33.9	19.3	53.2
2011	45.4	24.6	55.2	54.7	28.6	208.4	33.7	21.2	55.0
2016	42.2	23.6	51.1	56.2	32.5	205.5	32.3	24.9	57.1
2021	37.6	23.8	44.9	56.7	37.4	200.5	30.0	29.8	59.8
2026	32.9	22.1	39.1	56.8	42.6	193.6	27.9	36.1	64.0
2031	28.8	19.4	34.4	55.5	47.0	185.2	26.4	43.0	69.4
Mid-West									
1996	75.9	56.0	85.1	62.7	37.5	317.1	37.2	18.4	55.6
2001	72.3	58.5	91.1	71.0	38.1	331.0	32.8	17.3	50.0
2006	73.8	52.4	99.5	79.1	39.7	344.5	32.0	17.2	49.1
2011	77.4	45.8	104.9	84.1	44.0	356.2	33.0	18.7	51.7
2016	77.0	46.3	105.0	85.8	50.9	364.9	32.5	21.5	53.9
2021	73.2	49.6	98.9	90.8	58.1	370.6	30.6	24.3	54.9
2026	67.7	50.4	92.1	98.4	65.0	373.6	28.1	27.0	55.1
2031	63.1	49.0	88.9	103.3	70.8	375.1	26.2	29.3	55.5
South-East									
1996	95.6	65.2	106.4	77.7	46.6	391.5	38.3	18.7	57.0
2001	89.7	65.9	110.6	87.8	48.4	402.4	33.9	18.3	52.3
2006	86.6	59.9	114.5	98.5	51.0	410.5	31.7	18.7	50.4
2011	84.1	52.5	114.0	106.9	56.6	414.1	30.8	20.7	51.5
2016	78.1	50.5	109.0	111.4	64.8	413.8	28.8	23.9	52.7
2021	70.8	50.3	100.5	114.8	73.9	410.3	26.6	27.8	54.5
2026	64.1	46.6	91.5	118.0	83.5	403.7	25.0	32.6	57.7
2031	58.4	41.6	84.2	117.4	92.7	394.3	24.0	38.1	62.1
South-West									
1996	128.0	93.6	150.4	108.5	66.1	546.6	36.3	18.8	55.1
2001	120.8	93.9	158.4	122.2	67.6	563.0	32.3	18.1	50.3
2006	120.5	84.5	165.2	136.6	70.6	577.4	31.2	18.3	49.5
2011	122.2	74.2	165.9	147.9	77.4	587.7	31.5	20.0	51.4
2016	118.9	73.3	159.7	152.8	88.8	593.4	30.8	23.0	53.8
2021	111.6	76.0	147.0	159.2	101.0	594.8	29.2	26.4	55.6
2026	103.0	75.0	135.0	165.0	113.7	591.8	27.5	30.3	57.8
2031	95.6	71.2	127.9	165.3	125.8	585.7	26.2	34.5	60.8
West									
1996	84.4	59.4	90.7	68.7	49.2	352.4	38.6	22.5	61.0
2001	79.0	63.6	99.6	78.7	48.0	368.9	32.6	19.9	52.5
2006	79.1	58.6	110.1	89.3	48.1	385.2	30.7	18.6	49.3
2011	82.4	51.1	118.3	96.4	51.5	399.6	31.0	19.4	50.3
2016	83.5	49.2	118.7	100.9	58.4	410.7	31.1	21.7	52.8
2021	81.4	51.6	111.6	108.0	66.9	419.5	30.0	24.7	54.7
2026	76.7	53.2	102.5	117.0	75.8	425.2	28.1	27.8	55.9
2031	71.6	53.0	96.9	124.1	83.1	428.7	26.1	30.3	56.5

Figure 6 Projected population under high (M1F1) and low (M2F3) scenarios



Different scenarios

At the national level the population is projected to increase under all six combinations of assumptions (i.e. M1F1, M1F2, M1F3, M2F1, M2F2 and M2F3) between 1996 and 2031. The range of outcomes for the projected population in 2031 is about 810,000.

The populations of four of the eight regions - Dublin, the Mid-East, the Mid-West and the West - are projected to increase between 1996 and 2031 regardless of which of the six scenarios is chosen. Even under the low growth scenario (low inward migration and low fertility - M2F3) the population of the Dublin and Mid-East regions is projected to increase by a third during this period. Growth in the West (+3.3%) and the Mid-West (+2.5%) will be more modest under this scenario.

The Border and South-West regions will record an increase in population according to all but the M2F2 and M2F3 scenarios, while the only combinations of assumptions likely to yield population growth in the South-East region are M1F1 and M1F2. The population of the Midland region is projected to decline under all combinations of assumptions.

In percentage terms the range of population outcomes in 2031 (i.e. the difference between the highest and lowest growth scenarios) will be greatest for the West region (24.5%) and smallest for the Mid-East region (18.3%).

¹ Population and Labour Force Projections, 2001-2031, Pn 7491, Stationery Office, Dublin, July 1999.

² The Regional Authority areas that came into operation in 1994 are defined on page 12.

Assumptions

Fertility

The national population projections published in July 1999 distinguished three fertility assumptions as follows:

- **F1:** TFR (Total Fertility Rate) to increase from its 1998 level to 2.0 by 2001 and remain constant thereafter;
- **F2:** TFR to remain constant at its 1998 level to 2001, decrease to 1.75 by 2011 and remain constant thereafter;
- **F3:** TFR to remain constant at its 1998 level to 2001, decrease to 1.5 by 2011 and remain constant thereafter.

In order to maintain consistency with the national projections, the age specific fertility rates for each region in 1998 were used as the starting point in the regional projections. If the factors, which were used in the national projections, were applied uniformly to each of the regions then the regional differentials observed in 1998 would have been maintained unchanged throughout the projection period. Given that the rate of fertility change has not been uniform across regions (see *Table A1* for the 1986-1998 period), it was decided to reflect this differential rate of change in the regional fertility assumptions. However, it was necessary to recalibrate the resulting figures in order to minimise the variation between the derived projected fertility rates and the published ones at national level. The projected total fertility rates are given in *Table A2*.

Table A1 TFRs for Regional Authority areas, 1986 and 1998

Year	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West	State
1986	2.62	1.98	2.58	2.65	2.52	2.56	2.40	2.54	2.35
1998	2.06	1.74	2.06	2.27	2.15	2.03	2.00	1.97	1.93
Average annual % change	-1.29	-1.23	-1.28	-1.25	-1.25	-1.29	-1.27	-1.30	-1.27

Table A2 Projected TFRs for Regional Authority areas to 2031

Scenario / Year	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West
F1								
2001-2031	2.11	1.82	2.12	2.36	2.23	2.09	2.07	2.02
F2								
2001	2.06	1.74	2.06	2.27	2.15	2.03	2.00	1.97
2006	1.92	1.70	1.93	2.19	2.07	1.90	1.90	1.83
2011-2031	1.78	1.66	1.81	2.11	1.99	1.78	1.81	1.69
F3								
2001	2.06	1.74	2.06	2.27	2.15	2.03	2.00	1.97
2006	1.77	1.58	1.79	2.03	1.91	1.76	1.76	1.69
2011-2031	1.53	1.42	1.55	1.81	1.71	1.53	1.56	1.45

Mortality

Regional life tables for 1996 were produced and the resulting survivorship rates were incorporated into the regional projection model. However, there was no significant difference in the number of projected deaths at regional level between the revised method used and that used in the national projection model. Therefore, it was decided to apply the national mortality rates to the relevant regional populations in the regional projection model. At national level the assumptions are

that mortality rates will decrease consistent with gains in life expectancy at birth from:

- 73.0 years in 1995/97 to 77.8 years in 2030/32 for males; and
- 78.7 years in 1995/97 to 84.0 years in 2030/32 for females.

International Migration

Two migration assumptions were used in compiling the population projections at national level. These are:

M1: Net immigration continuing but diminishing

- +20,000 per annum in 1996/2001
- +15,000 per annum in 2001/2006
- +10,000 per annum in 2006/2011
- +5,000 per annum in 2011/2031

M2: Net immigration followed by net emigration

- +15,000 per annum in 1996/2001
- +5,000 per annum in 2001/2006
- zero net migration in 2006/2011
- -5,000 per annum in 2011/2031.

The gross flow components of these assumptions, which are reproduced in Table A5, are regionally sub-divided using Quarterly National Household Survey (QNHS) data. The regional breakdowns are based on average percentage flows to and from each Regional Authority area during the period 1992-2000. The factors used are given in Table A3 while the resulting assumed annual regional flows are given in Table A5. These gross flows are broken down by single year of age and sex on the same basis as for the total flows into and out of the State (i.e. no region-specific age distribution has been applied).

Table A3 Percentage distribution of gross migration flows by Regional Authority area

	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West
	Percentage							
Immigration	8.4	42.0	8.8	3.3	7.3	7.0	11.5	11.7
Emigration	9.4	33.0	9.6	4.6	8.6	9.1	15.3	10.4

Source: QNHS, 1992-2000

Internal Migration

By examining a person's usual residence at the time of a census and one year previously it is possible to determine inter-regional migration patterns. An analysis of the one-year inflow figures from the 1981, 1986, 1991 and 1996 censuses for internal migration between regions reveals a fairly stable picture in terms of the magnitudes of the inward, outward and net migration flows. Because of the stability of the underlying data it was decided to apply the annual inflow and outflow figures derived from the 1996 Census to each projection year. The inflows to each region are broken down by single year of age and sex based on the 1996 Census data. The outflows from a particular region to every other region are derived as sums of appropriate inflows with their corresponding breakdowns by age and sex. The resultant annual regional flows are given in Table A4.

Table A4 Assumed annual internal migration flows, 1996-2031

Migration	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West	State
	Thousands								
Inwards	3.6	14.9	8.5	2.8	5.0	4.7	4.6	4.8	48.8
Outwards	4.5	12.8	6.6	3.8	5.3	5.4	5.4	5.0	48.8
Net inwards	-1.0	2.1	2.0	-1.0	-0.3	-0.7	-0.8	-0.3	0.0

Table A5 Assumed average annual international migration flows, 1996-2031

Scenario / Year	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West	State
Thousands									
Immigration									
M1									
1996/2001	3.7	18.5	3.9	1.5	3.2	3.1	5.1	5.1	44.0
2001/2006	3.3	16.8	3.5	1.3	2.9	2.8	4.6	4.7	40.0
2006/2011	2.9	14.7	3.1	1.2	2.6	2.4	4.0	4.1	35.0
2011/2031	2.1	10.5	2.2	0.8	1.8	1.7	2.9	2.9	25.0
M2									
1996/2001	3.3	16.8	3.5	1.3	2.9	2.8	4.6	4.7	40.0
2001/2006	2.5	12.6	2.7	1.0	2.2	2.1	3.4	3.5	30.0
2006/2011	2.1	10.5	2.2	0.8	1.8	1.7	2.9	2.9	25.0
2011/2031	1.7	8.4	1.8	0.7	1.5	1.4	2.3	2.3	20.0
Emigration									
M1									
1996/2001	2.3	7.9	2.3	1.1	2.1	2.2	3.7	2.5	24.0
2001/2006	2.4	8.3	2.4	1.2	2.1	2.3	3.8	2.6	25.0
2006/2011	2.4	8.3	2.4	1.2	2.1	2.3	3.8	2.6	25.0
2011/2031	1.9	6.6	1.9	0.9	1.7	1.8	3.1	2.1	20.0
M2									
1996/2001	2.4	8.3	2.4	1.2	2.1	2.3	3.8	2.6	25.0
2001/2006	2.4	8.3	2.4	1.2	2.1	2.3	3.8	2.6	25.0
2006/2011	2.4	8.3	2.4	1.2	2.1	2.3	3.8	2.6	25.0
2011/2031	2.4	8.3	2.4	1.2	2.1	2.3	3.8	2.6	25.0
Net immigration									
M1									
1996/2001	1.4	10.5	1.6	0.4	1.2	0.9	1.4	2.6	20.0
2001/2006	1.0	8.5	1.1	0.2	0.8	0.5	0.8	2.1	15.0
2006/2011	0.6	6.4	0.7	0.0	0.4	0.2	0.2	1.5	10.0
2011/2031	0.2	3.9	0.3	-0.1	0.1	-0.1	-0.2	0.8	5.0
M2									
1996/2001	1.0	8.5	1.1	0.2	0.8	0.5	0.8	2.1	15.0
2001/2006	0.2	4.3	0.3	-0.2	0.0	-0.2	-0.4	0.9	5.0
2006/2011	-0.3	2.2	-0.2	-0.3	-0.3	-0.5	-0.9	0.3	0.0
2011/2031	-0.7	0.1	-0.6	-0.5	-0.7	-0.9	-1.5	-0.3	-5.0

Background Notes

Methodology

The regional population projections contained in this release represent a top-down disaggregation of the national projections published in 1999. The assumptions used in the national model (fertility, mortality and international migration) are regionalised mainly based on recent historical data, while migration between regions is also assessed. The outcome of this procedure is a set of regional population projections based on what would be likely to happen if recent trends in fertility, mortality, inter-regional and international migration were to continue, subject to the overall constraint of the national population projections.

Limitations

Because of the greater uncertainty attaching to regional as distinct from national population projections, the results for individual Regional Authority areas must be regarded as somewhat tentative. It is important to note that no specific account is taken of the capacity or otherwise of any of the regions to absorb the additional projected population. Rather, the intention is to give an indication using recent demographic trends of how the population of the various areas is likely to evolve in the period to 2031. Specific policy initiatives, such as the National Spatial Strategy being developed by the Department of Environment and Local Government, may have a large bearing on how future population trends will evolve.

More detailed results

More detailed results are available from:

Census Inquiries Section	Phone 01-4977144
Central Statistics Office	Fax 01-4964597
Ardee Road	LoCall 1890 313 414
Rathmines	Email: census@cso.ie
Dublin 6.	Internet: http://www.cso.ie

NUTS2 and NUTS3 regions

The regional classifications in this release are based on the NUTS (Nomenclature of Territorial Units) classification used by Eurostat. The NUTS3 regions correspond to the eight Regional Authorities established under the Local Government Act, 1991 (Regional Authorities) (Establishment) Order, 1993, which came into operation on 1 January 1994. The NUTS2 regions, which were proposed by Government and agreed by Eurostat in 1999, are groupings of the NUTS3 regions. The composition of the regions is set out below.

Border, Midlands and Western NUTS2 Region		Southern and Eastern NUTS2 Region	
Border	Cavan	Dublin	Dublin County Borough
	Donegal		Dún Laoghaire/Rathdown
	Leitrim		Fingal
	Louth	South Dublin	
	Monaghan	Mid-East	Kildare
Sligo	Meath		
Midland	Laoighis	Wicklow	
	Longford	Mid-West	Clare
	Offaly		Limerick County Borough
Westmeath	Limerick County		
West	Galway County Borough	Tipperary North Riding	
	Galway County	South-East	Carlow
	Mayo		Kilkenny
	Roscommon		Tipperary South Riding
	Waterford County Borough		
		Waterford County	
		Wexford	
		South-West	Cork County Borough
			Cork County
			Kerry