

5.1.5 Demographic Trends ‘A Tale of Two Scenarios’

Throughout the 1990’s official published estimates (Mid Year Estimates) of Cardiff’s total population, and the components of population change, namely births; deaths and net migration, indicated that the City’s population was growing by approximately 1% per annum. This phenomenal growth rate was fuelled not only by natural growth (more births than deaths) but also by net in-migration.

The table below highlights the annual components of population change for Cardiff from 1991 to 2000, prior to the release of the 2001 Census of Population & Housing figures for the City.

Cardiff Unitary Authority Mid Year Estimates of Population and Components of Change 1991 – 2000 (Prior to Official Revised Trend Published on 27 th February 2003)								
Mid Year	Population At Start (MYE)	Mid Year Births	Mid Year Deaths	Natural Change (Births minus Deaths)	Implied Net Migration	Total Population Change	Population At End (MYE)	Mid Year
1991	300,000	4,420	2,990	1,430	600	2,030	302,030	1992
1992	302,030	4,160	3,220	940	2,230	3,170	305,200	1993
1993	305,200	4,050	2,950	1,100	230	1,330	306,530	1994
1994	306,530	4,070	3,080	990	1,900	2,890	309,420	1995
1995	309,420	4,030	3,120	910	4,710	5,620	315,040	1996
1996	315,040	3,970	3,160	810	2,430	3,240	318,280	1997
1997	318,280	4,050	2,950	1,100	1,560	2,660	320,940	1998
1998	320,940	3,930	3,100	830	2,600	3,430	324,370	1999
1999	324,370	3,600	3,000	600	2,500	3,100	327,490	2000
Total Change 91-00	-	36,280	27,570	8,710	18,760	27,490	-	Total Change 91-00

Source: office for National Statistics – Registrar General’s Office / Assembled by CRC

Note: All figures rounded to the nearest 10

Following the publication of the 2001 Census of Population figure for Cardiff the ONS announced that all previous population estimates and the components of change as far back as 1982 would be revised. The revised trend for Cardiff from 1991 to 2001 is highlighted in the table below:

Cardiff Unitary Authority Revised Mid Year Estimates of Population and Components of Change 1991 – 2001 (Revised Trend Published by ONS on 27 th February 2003)								
Mid Year	Population At Start (MYE)	Mid Year Births	Mid Year Deaths	Natural Change (Births Minus Deaths)	Implied Net Migration	Total Population Change	Population At End (MYE)	Mid Year
1991	296,940	4,420	2,990	1,430	-1,370	60	297,000	1992
1992	297,000	4,160	3,220	940	350	1,290	298,290	1993
1993	298,290	4,050	2,950	1,100	-1,850	-750	297,540	1994
1994	297,540	4,070	3,080	990	-90	900	298,440	1995
1995	298,440	4,030	3,120	910	2,410	3,320	301,760	1996
1996	301,760	3,970	3,160	810	610	1,420	303,180	1997
1997	303,180	4,050	2,950	1,100	-10	1,090	304,270	1998
1998	304,270	3,930	3,100	830	80	910	305,180	1999
1999	305,180	3,600	3,000	600	490	1,090	306,270	2000
2000	306,270	3,660	2,970	690	-1,740	-1,050	305,220	2001
Totals 91-01	-	39,940	30,540	9,400	-1,120	8,280	-	Totals 91-01

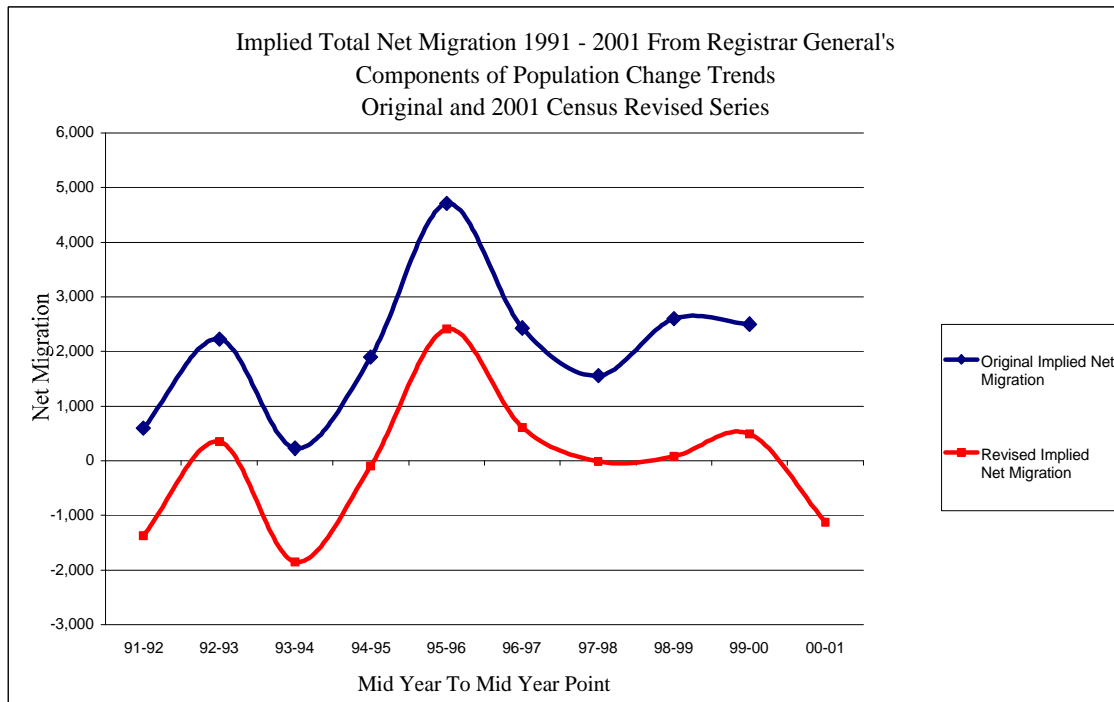
Source: Office for National Statistics – Registrar General’s Office / Assembled by CRC

Note: All figures rounded to the nearest 10

Close examination of the table above reveals that ONS claim Cardiff suffered from net out migration of population in the region of 1,100 persons between 1991 and 2001. This is astounding. Even more so when one considers that 12,000 new dwellings were built, 8,000 additional full time HE student places and 25,000 additional workforce jobs were created in Cardiff between 1991 and 2001.

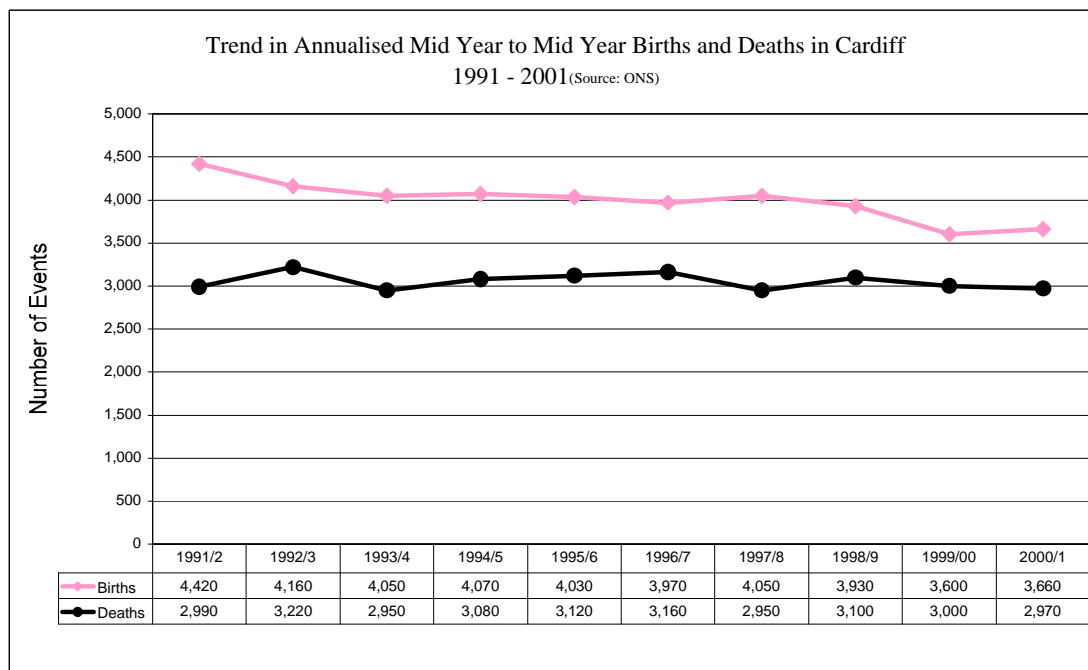
The revised net migration trend appears to have been achieved, largely, by subtracting approximately 2,000 net migrants from each year of the original trend, see the Figure below, to achieve the revised population trend highlighted in the table above.

Figure__



Source: Derived from ONS published figures by Cardiff Research Centre

The trend in births and deaths in Cardiff from 1991 to 2001 is one of continued natural growth, at no time were more deaths than births recorded. However as can be seen from the Figure below, there has been a convergence of births and deaths in recent years, reducing the amount of natural growth the City has experienced. This has been caused by a reduction in the number of live births rather than an increase in mortality among Cardiff residents. The apparent reduction in fertility over the 10 year period was replicated across Wales and Great Britain to a greater or lesser degree.



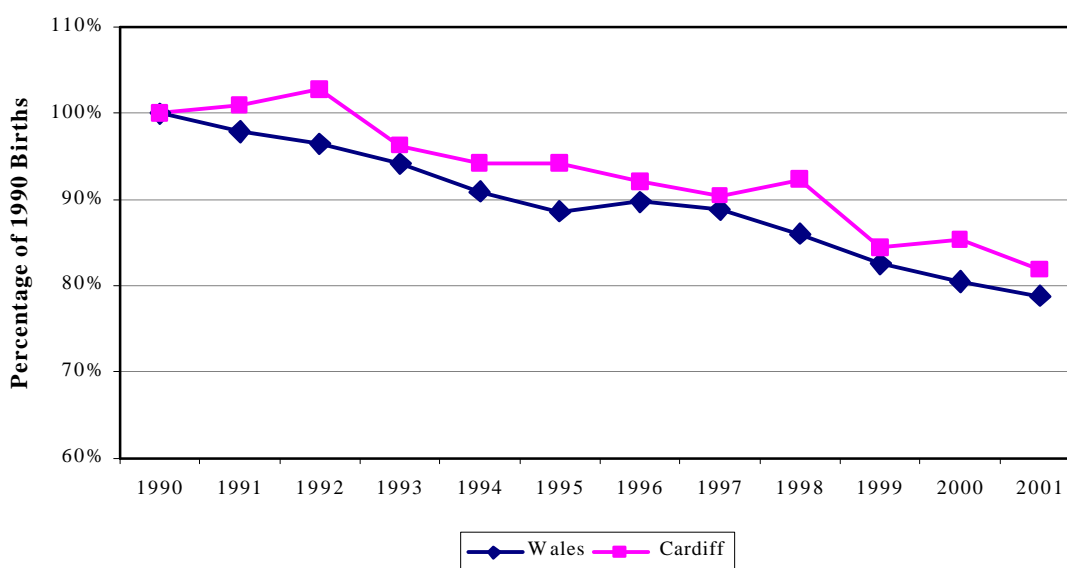
Birth Trends: 1990-2001

Live Births as a Percentage of 1990 Births [1990 = 100.0]												
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Cardiff	100.0	100.9	102.9	96.3	94.3	94.3	92.0	90.6	92.3	84.5	85.4	81.9
Wales	100.0	98.0	96.5	94.1	91.0	88.7	89.8	88.8	86.0	82.6	80.5	78.8

Source: Healthshow Classic 2003.01 (ONS)

Live births as a proportion (%) of 1990 births

Source: Healthshow Classic 2003.1 (ONS)



Annual Number of Live Births From 1990-2001 In Cardiff & Wales												
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Cardiff	4,384	4,425	4,509	4,222	4,132	4,132	4,034	3,970	4,046	3,706	3,744	3,589
Wales	38,866	38,079	37,523	36,578	35,366	34,477	34,894	34,504	33,438	32,111	31,304	30,616

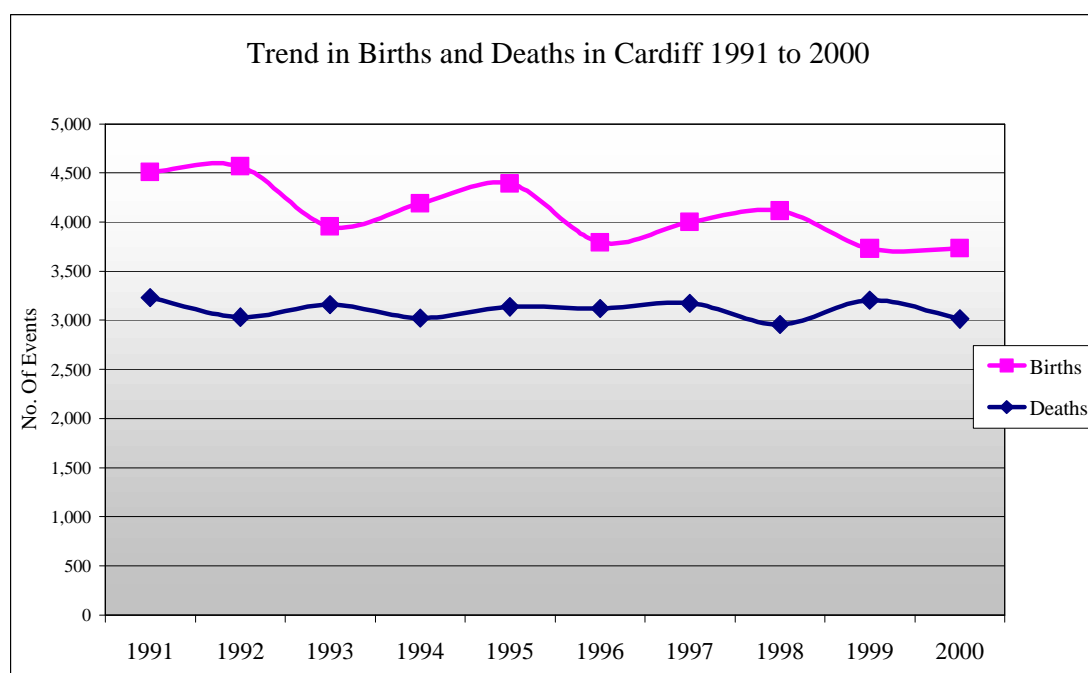
Source: Healthshow v2003.1 (ONS)

Trend in Natural Change in Population by Locality and Electoral Division 1991 - 2000

The following sections highlight the natural change in population (births minus deaths) for each LHB Locality and their constituent Electoral Divisions. Natural growth in population occurs when births outnumber deaths, conversely natural decline in population occurs when deaths outnumber births. The vital statistics data used in this section is that held in databases by NPHS Wales due to a number of errors that were discovered during the analysis stage in the published Vital Statistics for Cardiff's Electoral Divisions¹. The ONS have been alerted to the errors discovered and are investigating their published VS4 data sets for Cardiff.

¹ 'How Accurate is Official Vital Statistics Data?'; Nathan Lester, Siôn Ward, Stephen Christie, Anna Howard & Rhys Gibbon: NPHS Wales – Conference Abstract 2004

Cardiff



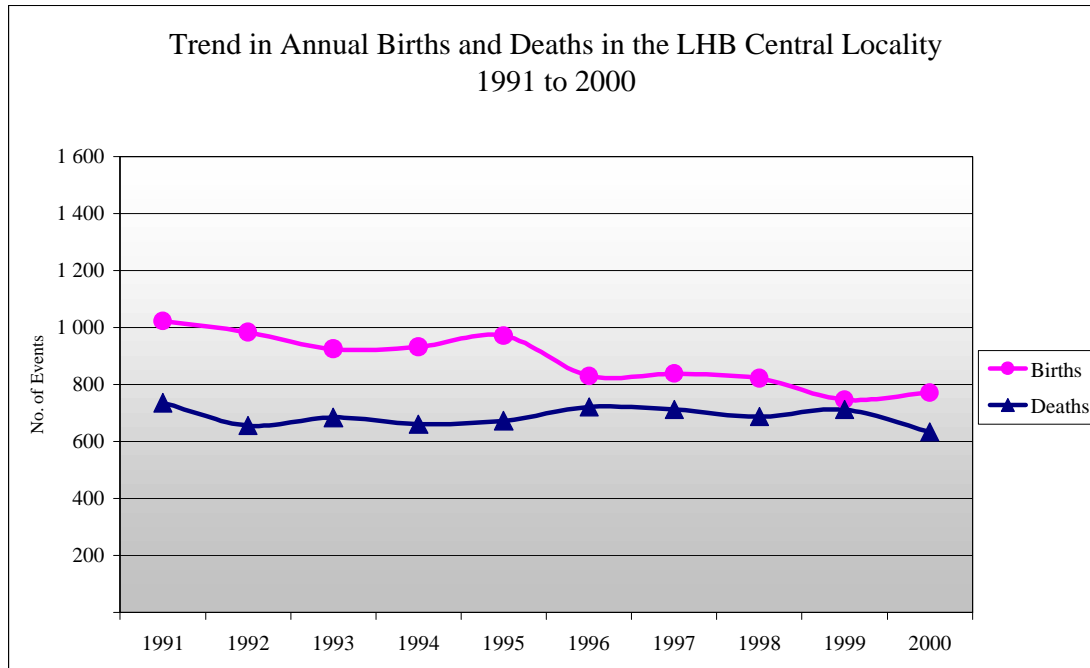
Cardiff - Annual Births & Deaths (NPHS Geocoded Dataset)											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	3,233	3,032	3,162	3,022	3,137	3,121	3,174	2,958	3,206	3,013	31,058
Births	4,509	4,567	3,957	4,188	4,392	3,794	4,000	4,115	3,729	3,732	40,983
Natural Change	1,276	1,535	795	1,166	1,255	673	826	1,157	523	719	9,925

Cardiff experienced significant natural growth in population from 1991 to 2000 with an average of 990 more births than deaths annually. However the rate of natural growth decreased by some 35% in Time Period 2 compared with Time Period 1. There has been a general decline in annual births, subsequently converging with annual numbers of deaths since 1991. Births have accounted for 56.9% of events recorded between 1991 and 2000.

Natural Change in Cardiff			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Change from Time Period 1 to 2
6,027	3,898	9,925	-35.3

Central Locality

Births in the Central locality have outnumbered deaths throughout the trend period, however annual natural growth has steadily declined due to decreasing numbers of births rather than an increase in deaths. This trend is highlighted in the figure below:



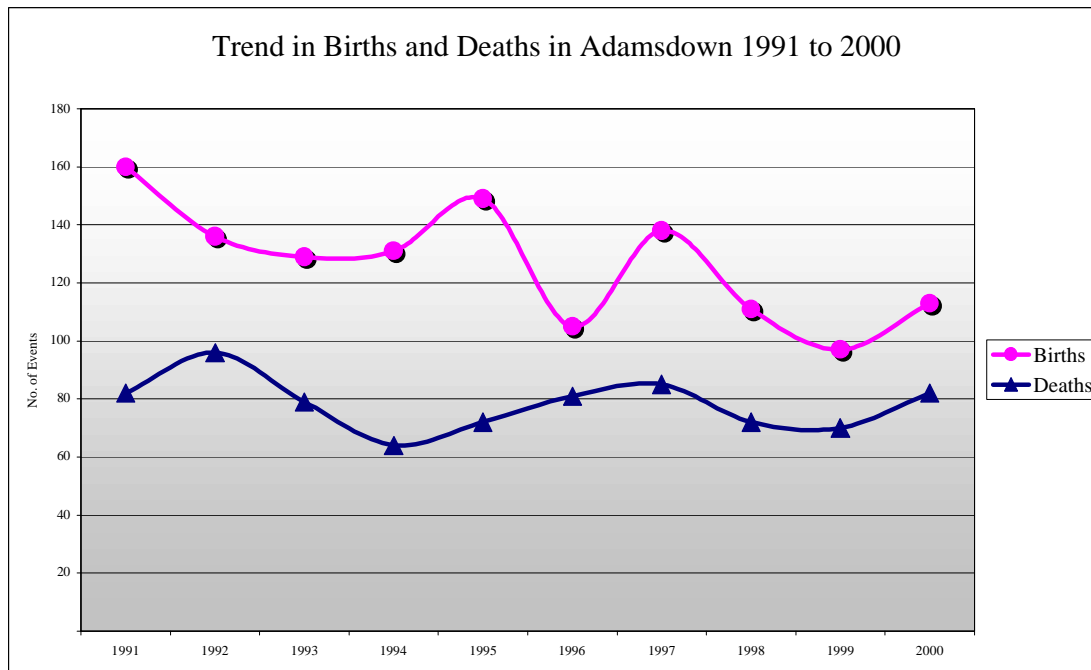
Central Locality – Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 year Total
Deaths	736	656	685	662	673	721	712	687	712	634	6 878
Births	1 023	983	925	932	971	830	838	821	747	772	8 842
Natural Change	287	327	240	270	298	109	126	134	35	138	1 964

There was a marked decrease in the natural change in population in the Central locality during the 1990s. Despite this decrease of some 62% in the second half of the time period, natural change remained positive with some 540 more births than deaths in period two. Births represented 56.2% of all events recorded between 1991 to 2000.

Natural Change in the Central Locality			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
1,422	542	1,964	-61.9

The six Electoral Divisions that comprise the Central Locality demonstrate divergent trends in natural change of population. The trends for each EDIV are highlighted below.

Adamsdown

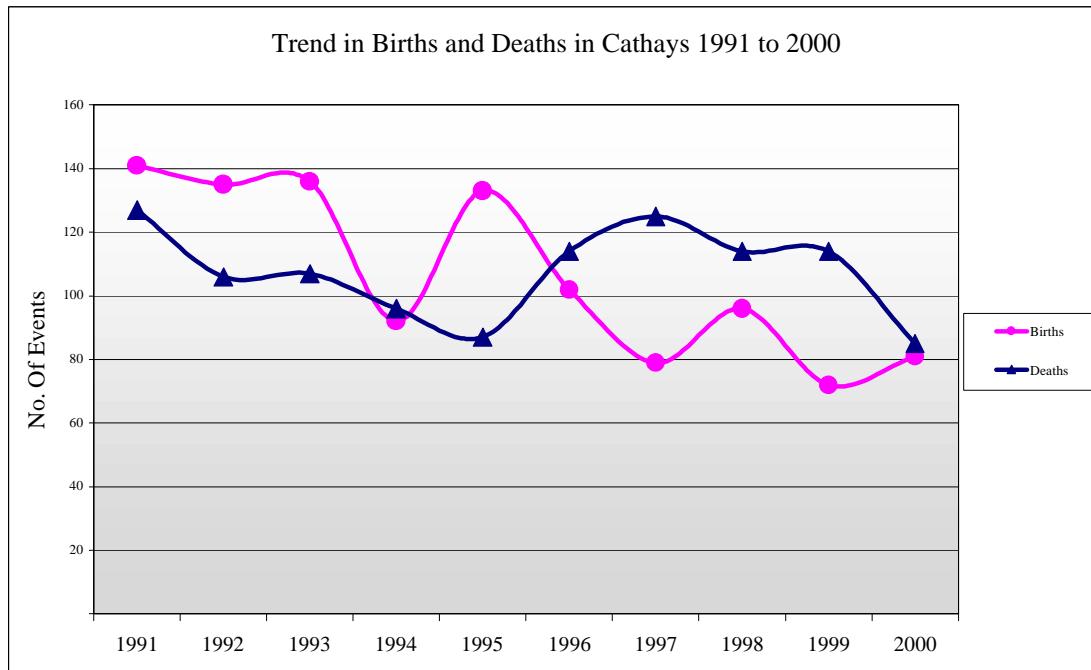


Adamsdown – Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	82	96	79	64	72	81	85	72	70	82	783
Births	160	136	129	131	149	105	138	111	97	113	1,269
Natural Change	78	40	50	67	77	24	53	39	27	31	486

Although natural change remained positive throughout the entire period leading to sustained natural growth of population there was a significant decline in natural change of some 44% during time period 2.

Natural Change in Adamsdown			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase / Decrease in NC from Time Period 1 to 2
312	174	486	-44.2

Cathays

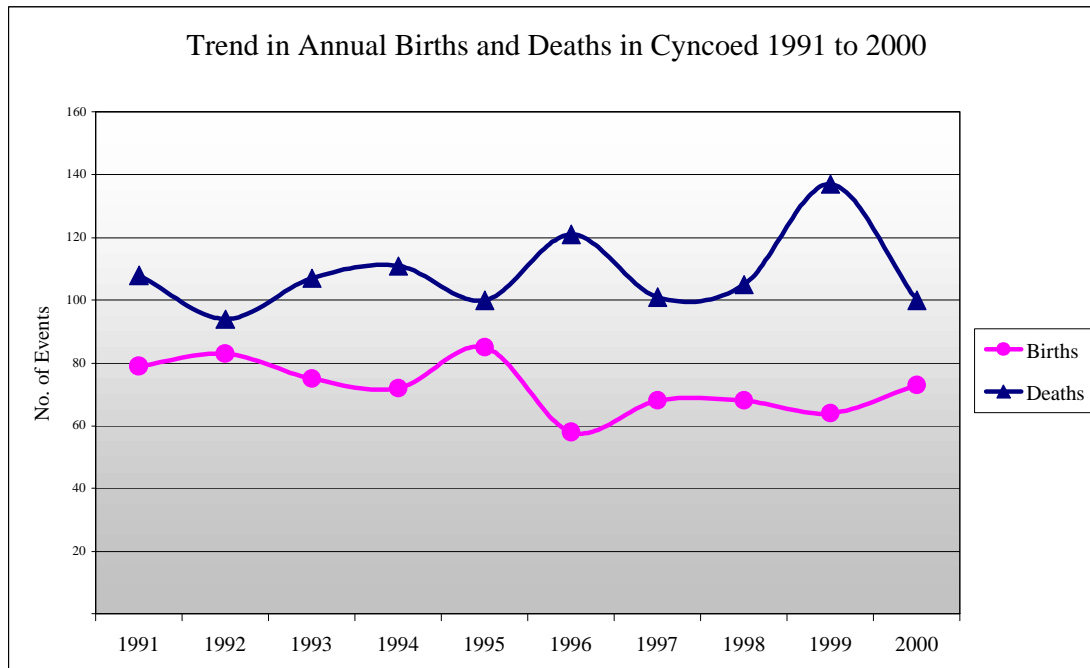


Cathays - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	127	106	107	96	87	114	125	114	114	85	1,075
Births	141	135	136	92	133	102	79	96	72	81	1,067
Natural Change	14	29	29	-4	46	-12	-46	-18	-42	-4	-8

Cathays experienced minor natural growth in population during time period 1, however this negligible growth underwent a reversal in time period 2 becoming a natural decrease. Both births and deaths have decreased over time with natural decline in population resulting from a greater decrease in births than deaths. Deaths represented 50.2% of all events recorded from 1991 to 2000.

Natural Change in Cathays			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
114	-122	-8	-207.0

Cyncoed

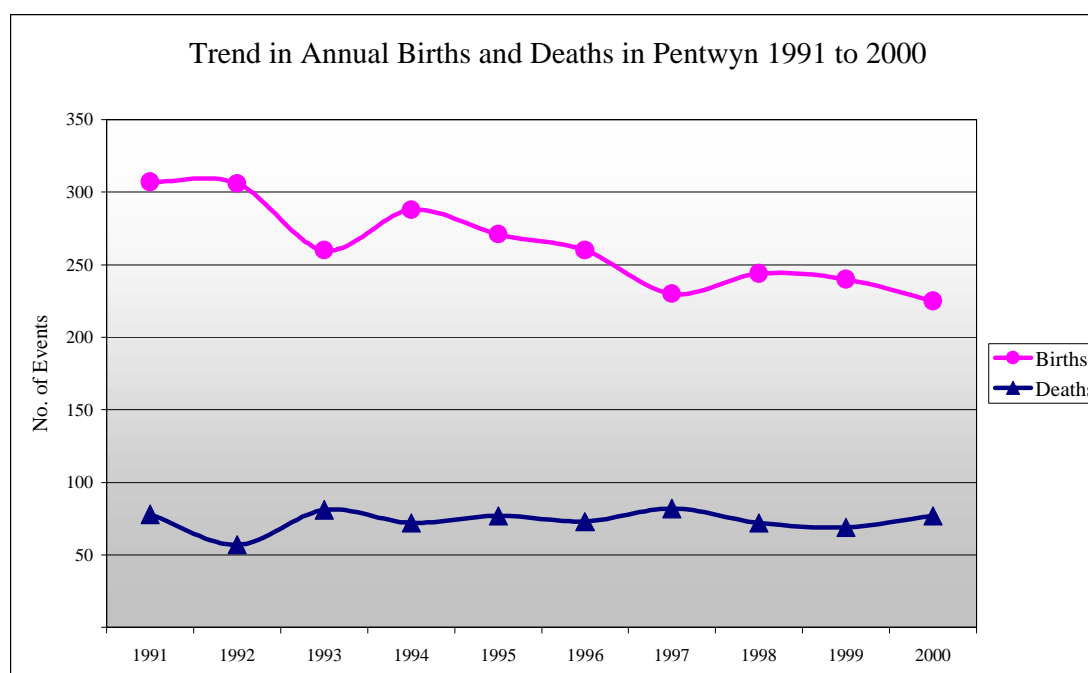


Cyncoed - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	108	94	107	111	100	121	101	105	137	100	1,084
Births	79	83	75	72	85	58	68	68	64	73	725
Natural Change	-29	-11	-32	-39	-15	-63	-33	-37	-73	-27	-359

Cyncoed experienced natural decline annually throughout the time period. Furthermore the natural population decrease grew by some 85% in time period 2 representing a divergence of the trend in annual births and deaths. The increase in deaths in period 2 was exaggerated by the number of events in 1996 and 1999 when significantly higher than average numbers of deaths were recorded. Such variations can be expected when the overall number of events is relatively small. Deaths represented 60% of all events recorded between 1991 and 2000.

Natural Change in Cyncoed			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Decline from Time Period 1 to 2
-126	-233	-359	84.9

Pentwyn

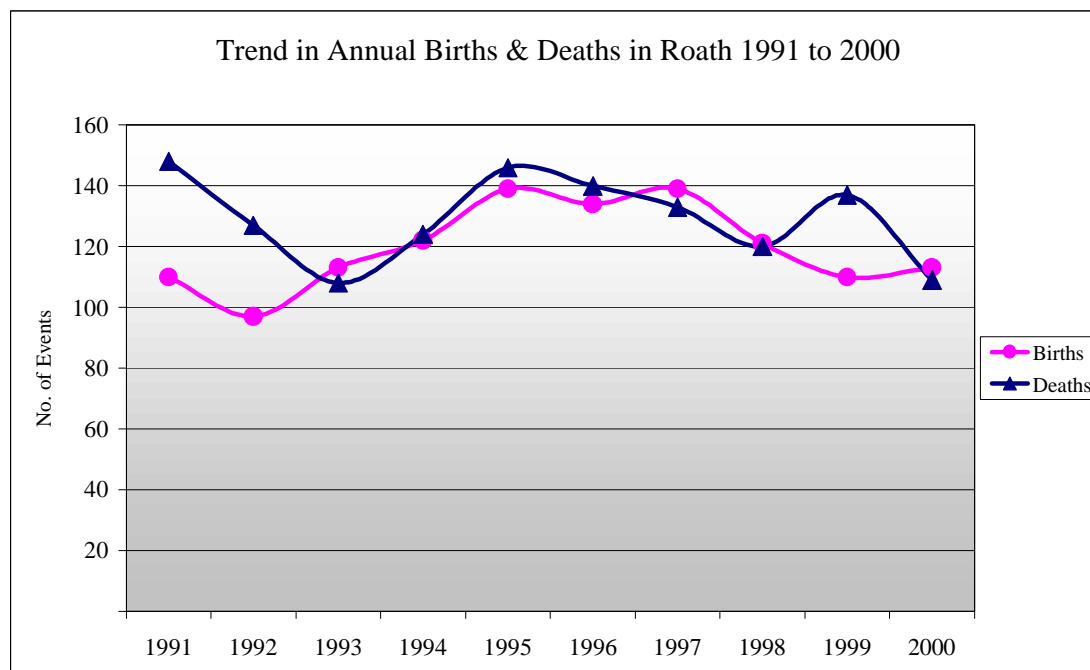


Pentwyn - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	78	57	81	72	77	73	82	72	69	77	738
Births	307	306	260	288	271	260	230	244	240	225	2,631
Natural Change	229	249	179	216	194	187	148	172	171	148	1,893

Pentwyn experienced a natural increase of population of almost 1,900 during the 10 year period. However, while deaths remained more or less constant throughout, annual births declined steadily. In period 2 (1996-2000) there was a 22.6% reduction in the level of natural growth. Despite this fact natural growth was still significantly higher than most surrounding areas in Cardiff. Births represented 78.1% of all events recorded between 1991 and 2000.

Natural Change in Pentwyn			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
1,067	826	1,893	-22.6

Penylan

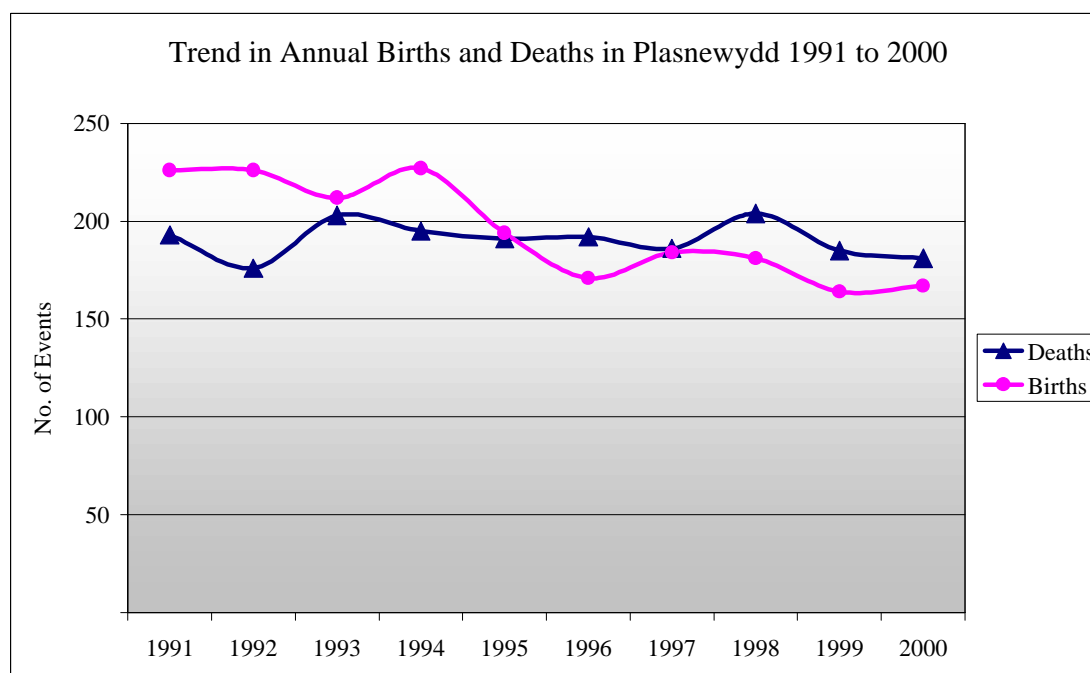


Penylan - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	148	127	108	124	146	140	133	120	137	109	1292
Births	110	97	113	122	139	134	139	121	110	113	1198
Natural Change	-38	-30	5	-2	-7	-6	6	1	-27	4	-94

Penylan experienced similar numbers of births and deaths throughout the period with a relatively small natural decline in population occurring due to slightly more deaths than births. Numbers of births and deaths both peaked in the mid 1990s. The level of natural decline experienced in Time Period 1 decreased in Time Period 2, however the totals are relatively small and the decline slowed in Time Period 2 due to a slight increase in the number of births during this time. Deaths represented 51.9% of events recorded from 1991 to 2000.

Natural Change in Penylan (Roath)			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Decline from Time Period 1 to 2
-72	-22	-94	42.1

Plasnewydd

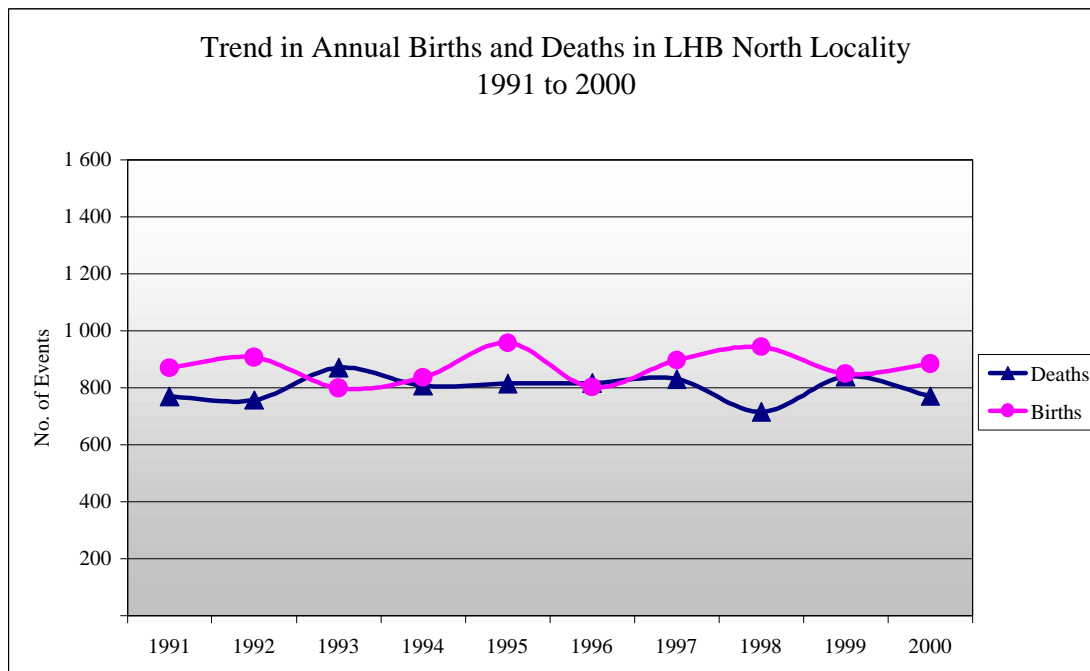


Plasnewydd - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	193	176	203	195	191	192	186	204	185	181	1,906
Births	226	226	212	227	194	171	184	181	164	167	1,952
Natural Change	33	50	9	32	3	-21	-2	-23	-21	-14	46

Births marginally outnumbered deaths in Plasnewydd between 1991 and 2000. However there was a decline in the number of births leading to natural decline during Time Period 2 while deaths remained more or less constant throughout the 10 year period. Births represented 50.6% of events recorded from 1991 to 2000.

Natural Change in Plasnewydd			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase / Decrease in NC from Time Period 1 to 2
127	-81	46	-163.8

North Locality

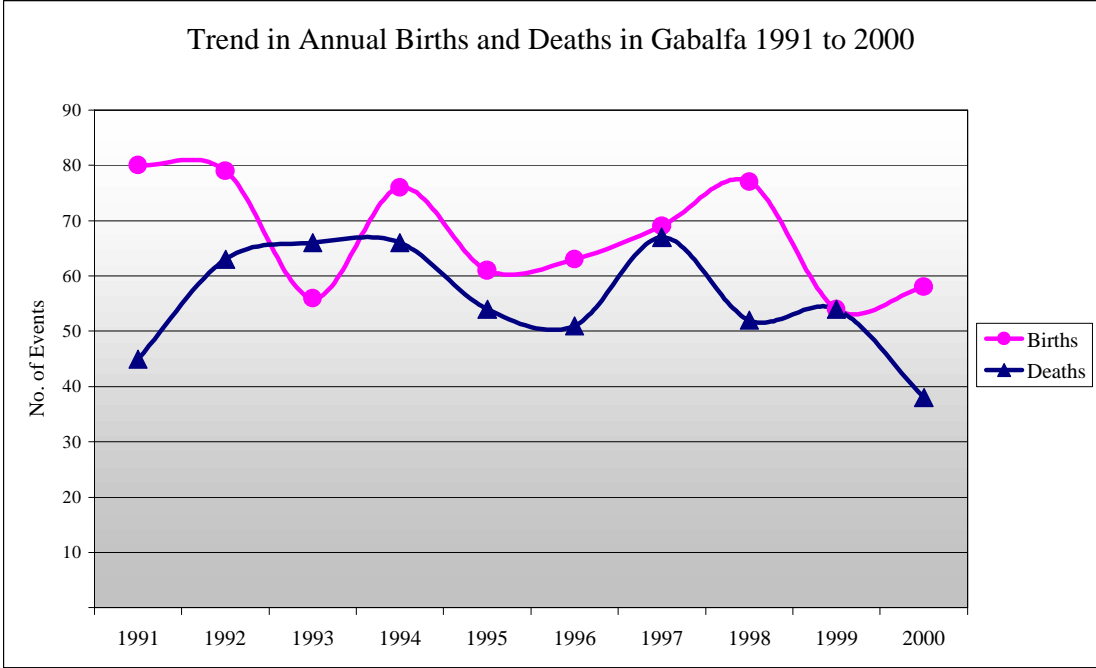


North Locality - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	770	757	871	807	815	817	831	716	839	771	7,994
Births	870	907	799	836	958	802	897	943	849	884	8,745
Natural Change	100	150	-72	29	143	-15	66	227	10	113	751

The North Locality experienced positive natural change overall, this increased by 14.6% in Time Period 2. Natural decline took place in two years only, namely 1993 and 1996. The greatest natural growth occurred in 1995 and 1998. Births represented 52.2% of all events recorded from 1991 to 2000.

Natural Change in the North Locality			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Growth from Time Period 1 to 2
350	401	751	14.6

Gabalfa

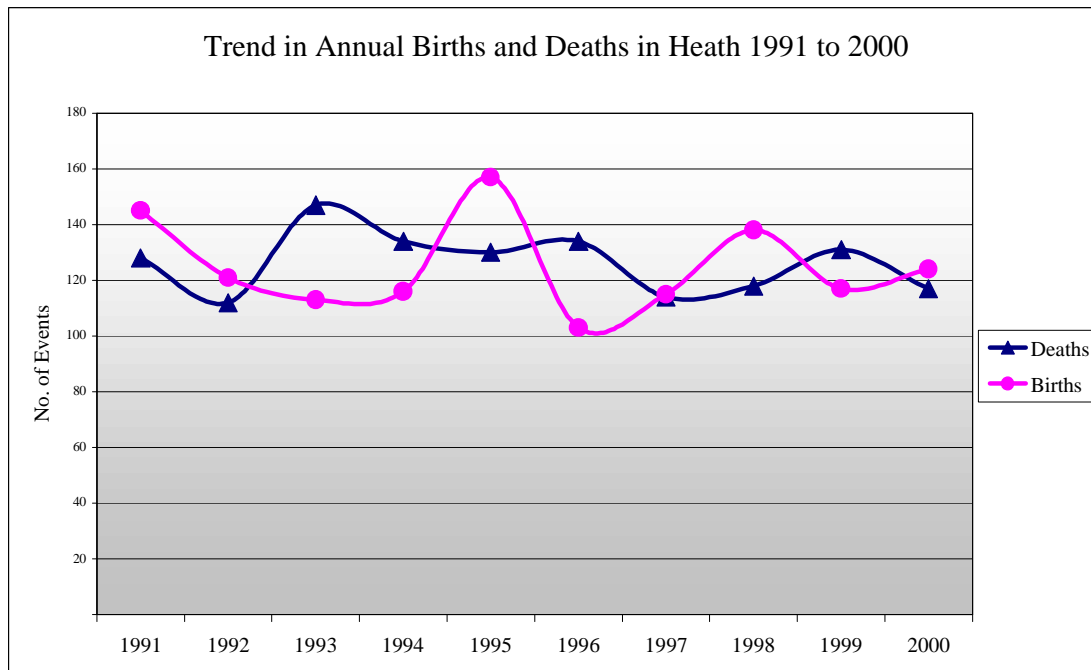


Gabalfa - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	45	63	66	66	54	51	67	52	54	38	556
Births	80	79	56	76	61	63	69	77	54	58	673
Natural Change	35	16	-10	10	7	12	2	25	0	20	117

Despite a population of approximately 10,000 Gabalfa experienced very small numbers of birth and death events due largely to the number of full time Higher Education students resident in the Electoral Division. Natural growth occurred in both Time Periods, however there was a general downward trend in the number of birth and death events throughout the Time Period. Births represent 54.8% of all events recorded from 1991 to 2000.

Natural Change in the North Locality			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Growth from Time Period 1 to 2
58	59	117	1.7

Heath

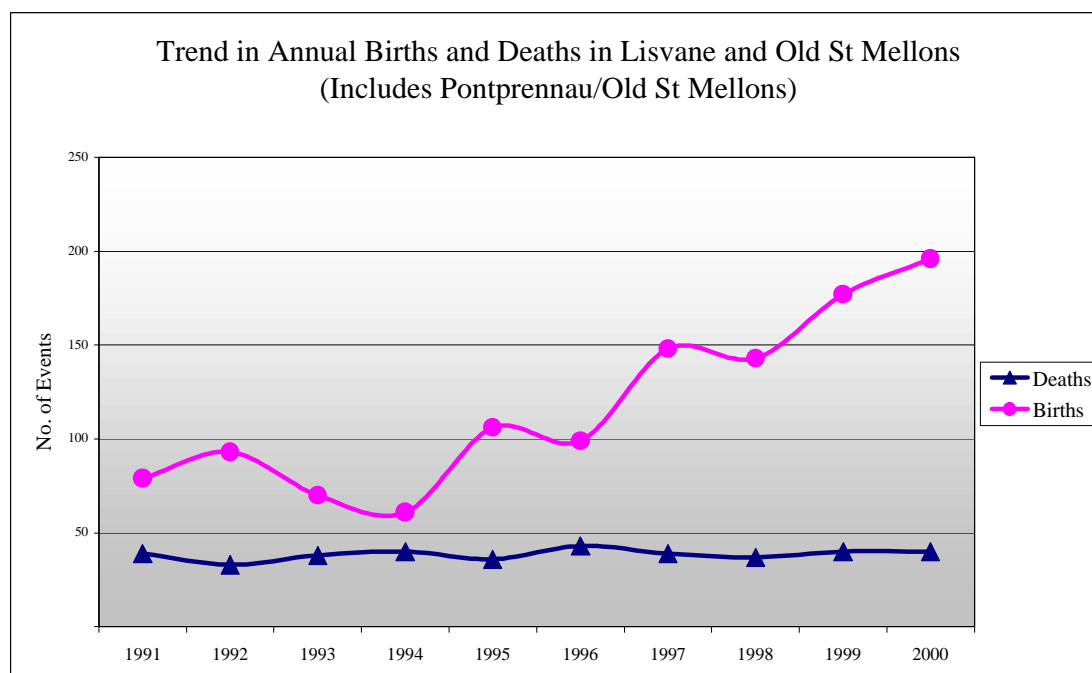


Heath - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	128	112	147	134	130	134	114	118	131	117	1265
Births	145	121	113	116	157	103	115	138	117	124	1249
Natural Change	17	9	-34	-18	27	-31	1	20	-14	7	-16

The Heath experienced a marginal natural decline throughout the trend period despite natural growth in six out of ten years. No distinct trend is obvious with the events in the Heath Electoral Division. The number of events appear to fluctuate randomly throughout the trend period. Deaths represent 50.3% of events recorded from 1991 to 2000.

Natural Change in the North Locality			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
1	-17	-16	-1,800.0

Lisvane & Old St Mellons

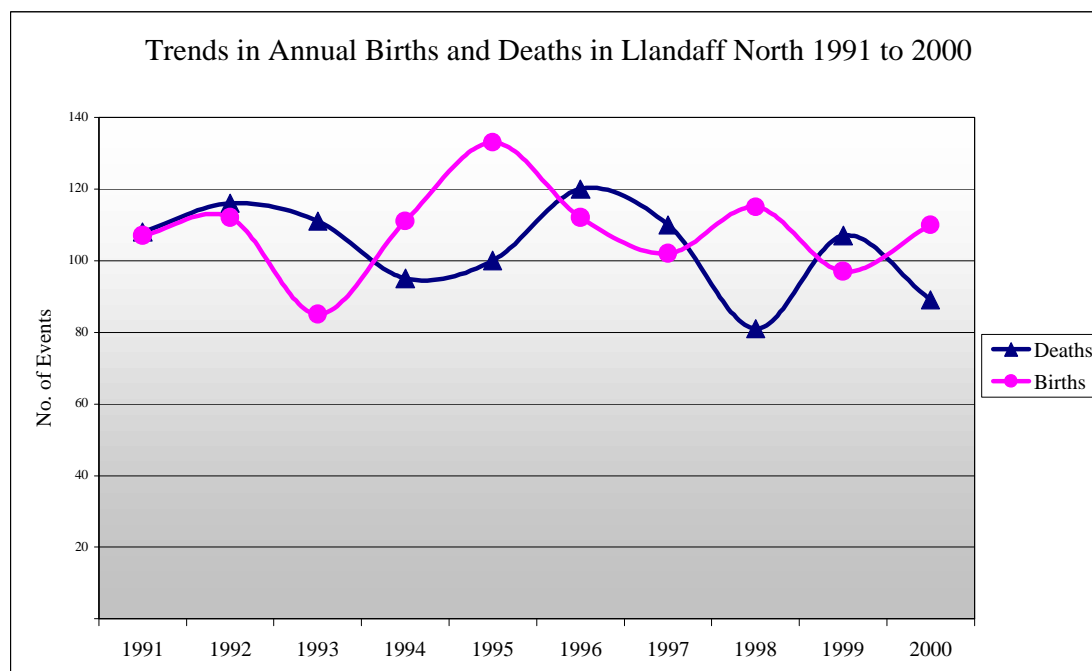


Lisvane & Old St Mellons - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	39	33	38	40	36	43	39	37	40	40	385
Births	79	93	70	61	106	99	148	143	177	196	1,172
Natural Change	40	60	32	21	70	56	109	106	137	156	787

Lisvane & Old St Mellons experienced natural growth throughout the trend period, this increased by approximately 153% during Time Period 2 as the effects of residential development (The new town effect of mass in migration of young people) in Pontprennau and Old St Mellons became evident. This trend was not evident in official VS4 statistics published by ONS due to an error with the geo-coding of events data. Births represent 75% of all events recorded from 1991 to 2000.

Natural Change in Lisvane & Old St Mellons			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase / Decrease in NC from Time Period 1 to 2
223	564	787	152.9

Llandaff North

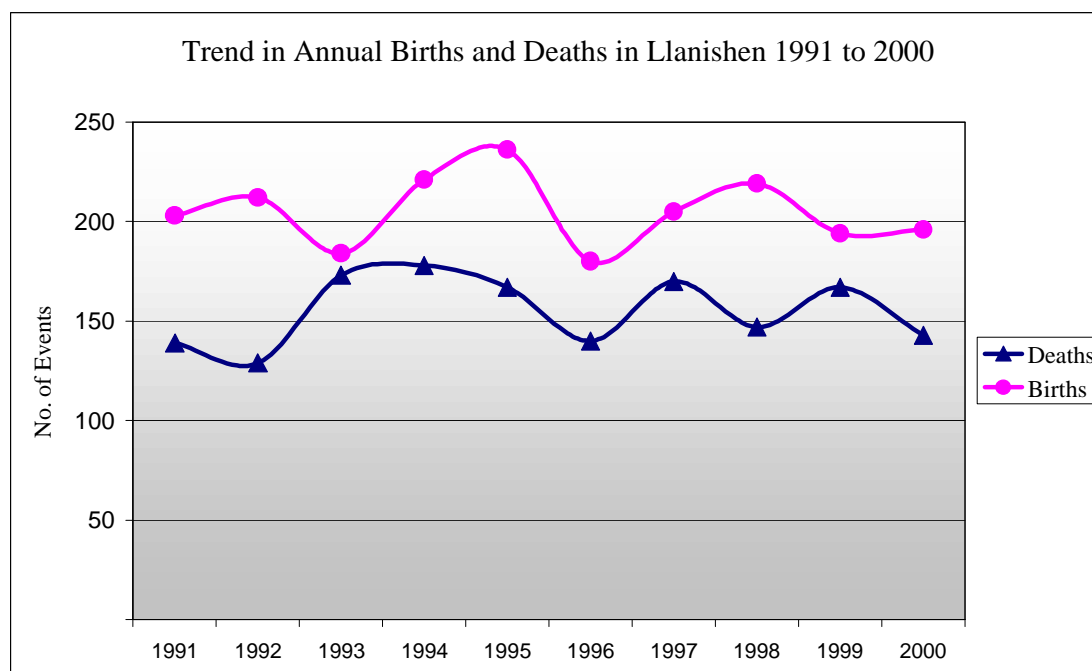


Llandaff North - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	108	116	111	95	100	120	110	81	107	89	1,037
Births	107	112	85	111	133	112	102	115	97	110	1,084
Natural Change	-1	-4	-26	16	33	-8	-8	34	-10	21	47

Llandaff North experienced marginal natural growth in Time Periods 1 & 2, with growth increasing by 61% in Time Period 2 although actual numbers are very small. Fluctuations in the annual number of births and deaths has resulted in some years of annual decline. Despite this births represent some 51.1% of all events from 1991 to 2000.

Natural Change in Llandaff North			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in NC from Time Period 1 to 2
18	29	47	61.1

Llanishen

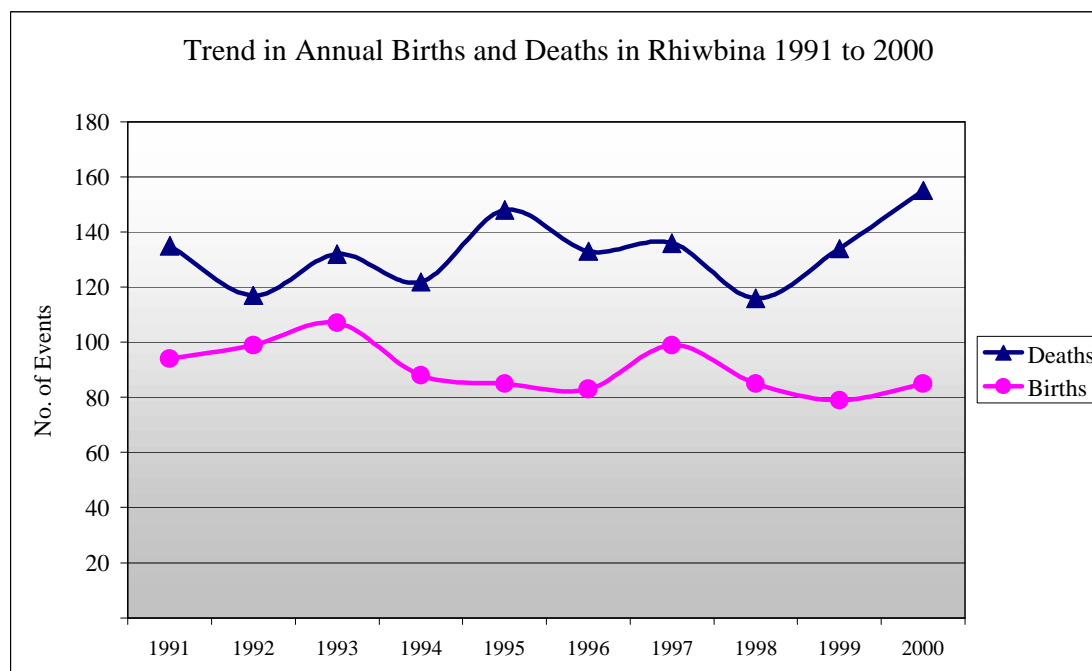


Llanishen - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	139	129	173	178	167	140	170	147	167	143	1,553
Births	203	212	184	221	236	180	205	219	194	196	2,050
Natural Change	64	83	11	43	69	40	35	72	27	53	497

Llanishen experienced natural growth throughout the trend period with a slight decrease in growth during Time Period 2. Overall births represented 56.9% of all recorded events from 1991 to 2000.

Natural Change in Llandishen			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
270	227	497	-15.9

Rhiwbina

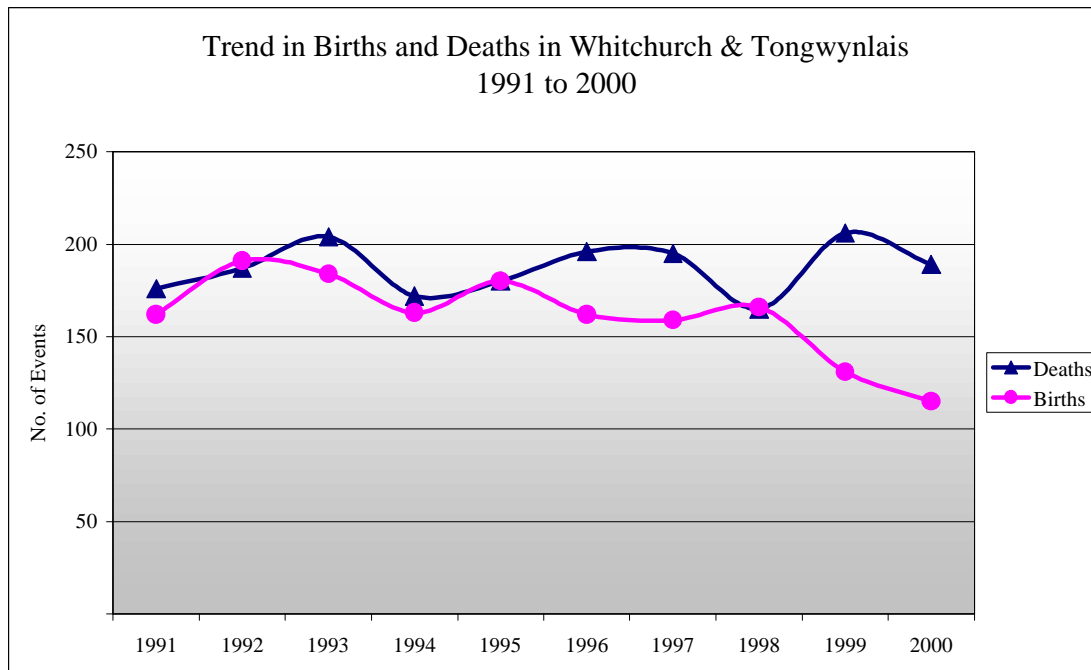


Rhiwbina - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	135	117	132	122	148	133	136	116	134	155	1328
Births	94	99	107	88	85	83	99	85	79	85	904
Natural Change	-41	-18	-25	-34	-63	-50	-37	-31	-55	-70	-424

Rhiwbina sustained natural decline in population throughout the trend period, this declined increased by 34% during Time Period 2 as births fell and deaths increased widening the gap. Deaths represented 59.5% of all events recorded between 1991 and 2000.

Natural Change in Rhiwbina			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Decline from Time Period 1 to 2
-181	-243	-424	34.3

Whitchurch & Tongwynlais

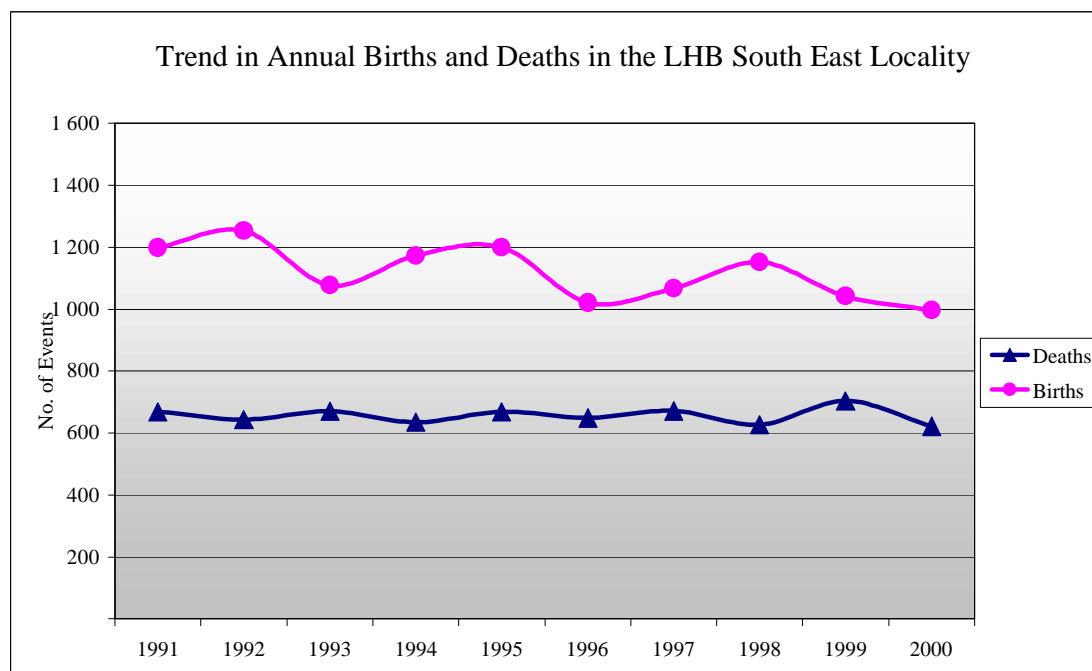


Whitchurch & Tongwynlais - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	176	187	204	172	180	196	195	165	206	189	1,870
Births	162	191	184	163	180	162	159	166	131	115	1,613
Natural Change	-14	4	-20	-9	0	-34	-36	1	-75	-74	-257

Whitchurch experienced natural decline in population with deaths outnumbering births in seven out of ten years. During Time Period 2 deaths increased and births decreased leading to a significant increase in natural decline of population of 459%. Deaths represented 53.7% of all events recorded from 1991 to 2000.

Natural Change in Whitchurch & Tongwynlais			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Decline from Time Period 1 to 2
-39	-218	-257	459.0

South East Locality

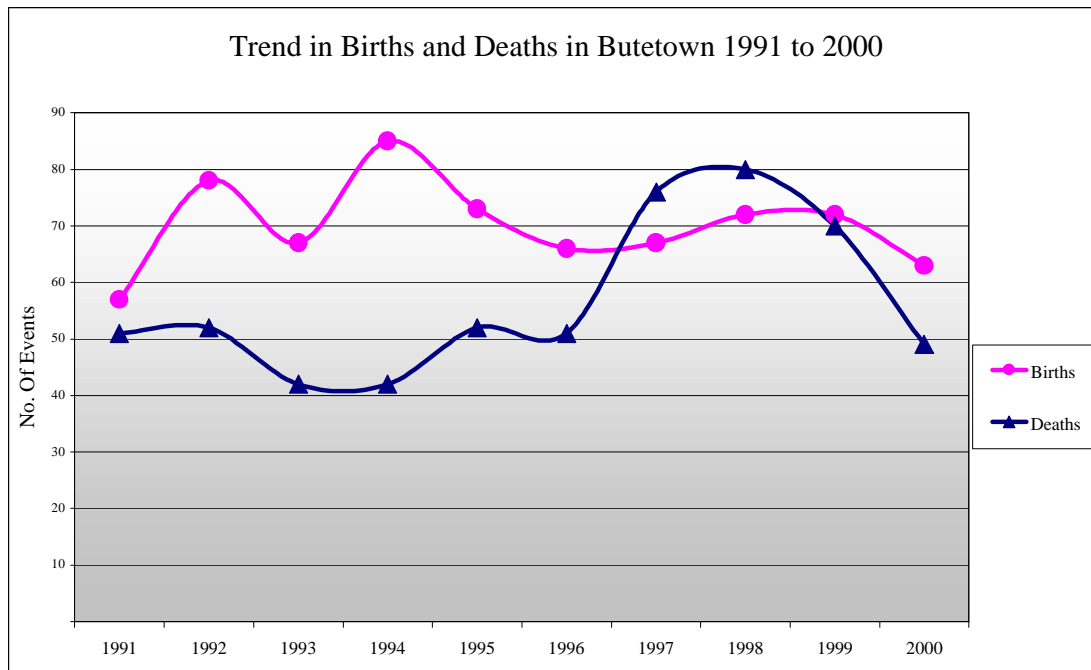


South East Locality - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	669	644	671	635	669	649	672	627	704	622	6,562
Births	1,199	1,253	1,077	1,173	1,200	1,021	1,067	1,152	1,042	997	11,181
Natural Change	530	609	406	538	531	372	395	525	338	375	4,619

The South East locality experienced significant natural increase in population throughout the trend period, however the growth decreased by some 23% in Time Period 2. Overall births represented some 63% of events recorded from 1991 to 2000.

Natural Change in the South East Locality			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
2,614	2,005	4,619	-23.3

Butetown

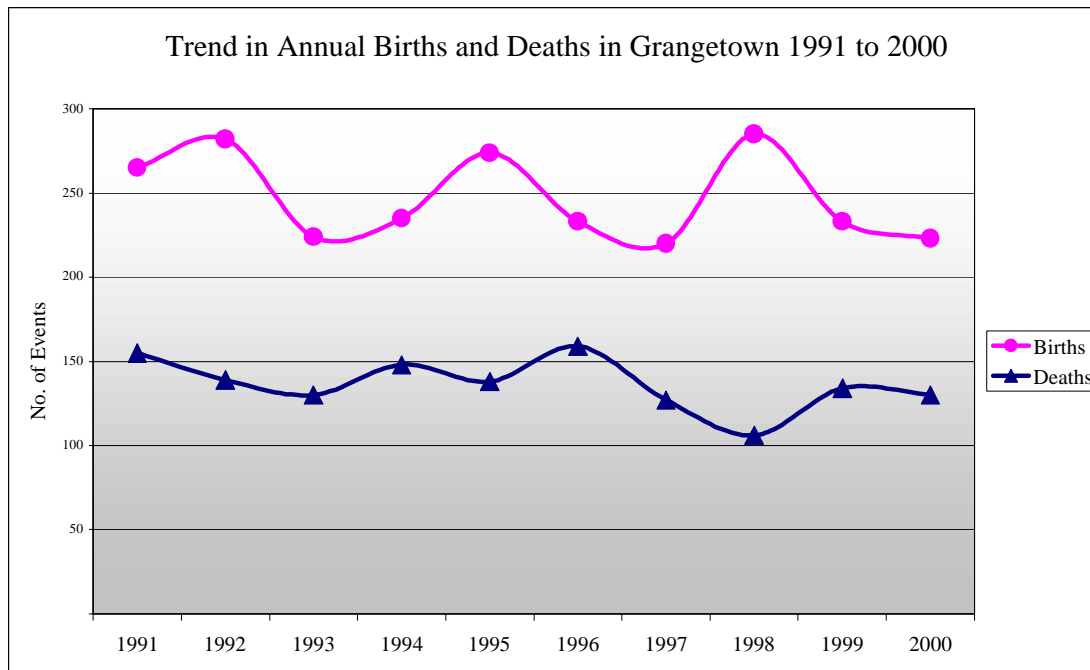


Butetown - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	51	52	42	42	52	51	76	80	70	49	565
Births	57	78	67	85	73	66	67	72	72	63	700
Natural Change	6	26	25	43	21	15	-9	-8	2	14	135

Butetown experienced natural growth in population from 1991 to 2000. However the natural growth decreased significantly, by 88.4%, in Time Period 2 including natural decline in 1997 and 1998. Overall Births represented 55.3% of recorded events in Butetown.

Natural Change in Butetown			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
121	14	135	-88.4

Grangetown

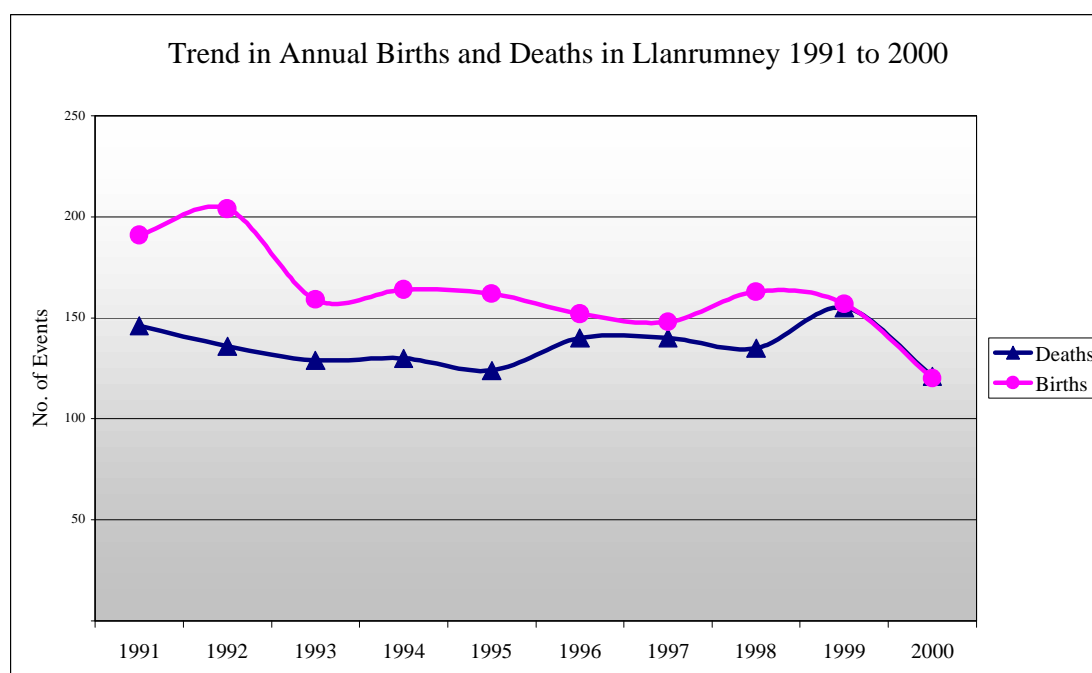


Grangetown - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	155	139	130	148	138	159	127	106	134	130	1,366
Births	265	282	224	235	274	233	220	285	233	223	2,474
Natural Change	110	143	94	87	136	74	93	179	99	93	1,108

Grangetown experienced significant natural growth of population throughout the trend period with only a marginal decrease in growth of some 5.6% in Time Period 2. Annual natural growth peaked in 1998 with almost 180 more births than deaths. Overall births represented 64.4% of events recorded in Grangetown from 1991 to 2000.

Natural Change in Grangetown			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
570	538	1,108	-5.6

Llanrumney

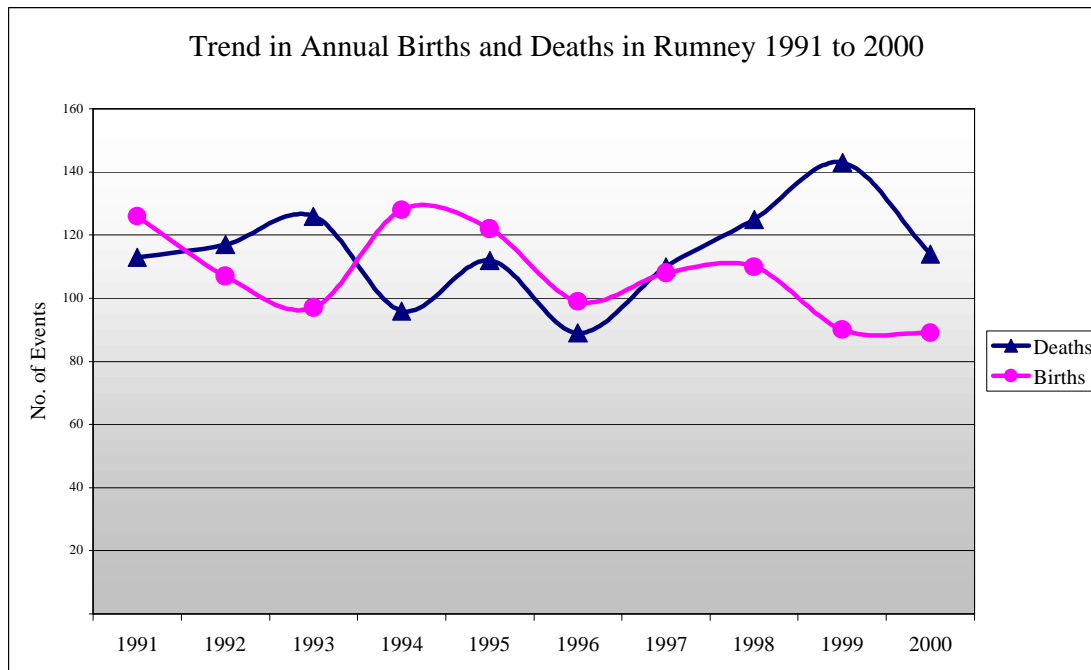


Llanrumney - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	146	136	129	130	124	140	140	135	155	121	1,356
Births	191	204	159	164	162	152	148	163	157	120	1,620
Natural Change	45	68	30	34	38	12	8	28	2	- 1	264

Llanrumney experienced natural growth during the trend period, however this reduced significantly by 77% in Time Period 2 including the most marginal of natural declines in the year 2000. Numbers of Births peaked in 1992 with deaths peaking in 1999. Overall births represented 54.4% of all recorded events from 1991 to 2000.

Natural Change in Llanrumney			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
215	49	264	-77.2

Rumney

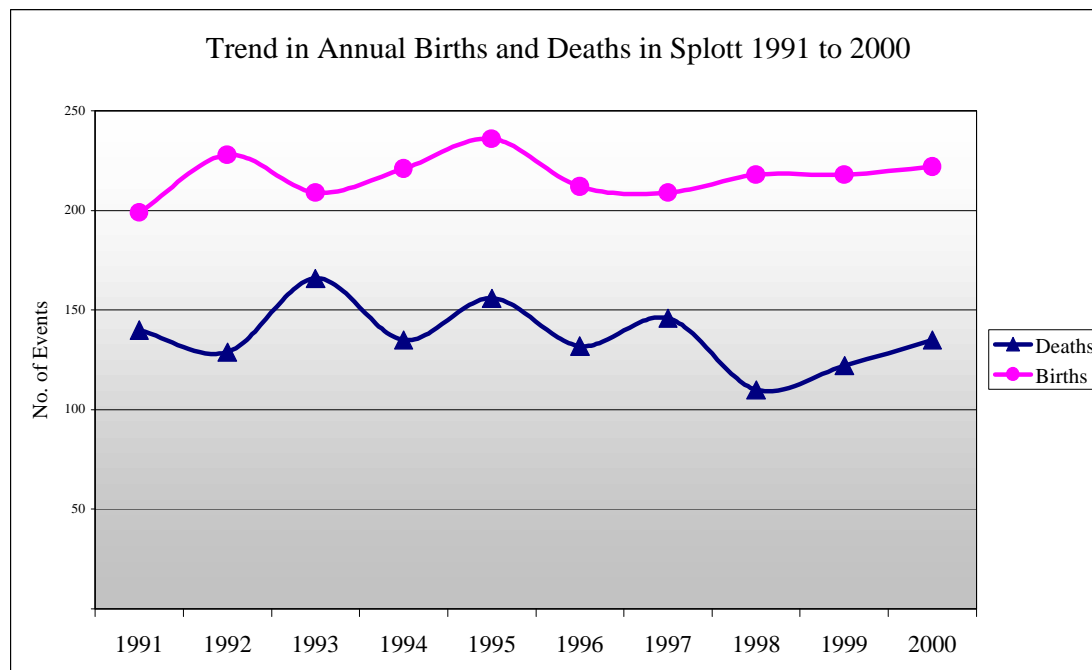


Rumney - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	113	117	126	96	112	89	110	125	143	114	1,145
Births	126	107	97	128	122	99	108	110	90	89	1,076
Natural Change	13	- 10	- 29	32	10	10	- 2	- 15	- 53	- 25	- 69

Rumney experienced fluctuating natural change throughout the trend period with an overall natural decline. Births peaked in 1991 and 1994 with deaths peaking during Time Period 2 in 1999. Marginal natural increase in Time Period 1 was reversed in Time Period 2. Overall deaths represented 51.6% of recorded events from 1991 to 2000.

Natural Change in Rumney			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Change from Time Period 1 to 2
16	-85	-69	-631.3

Splott

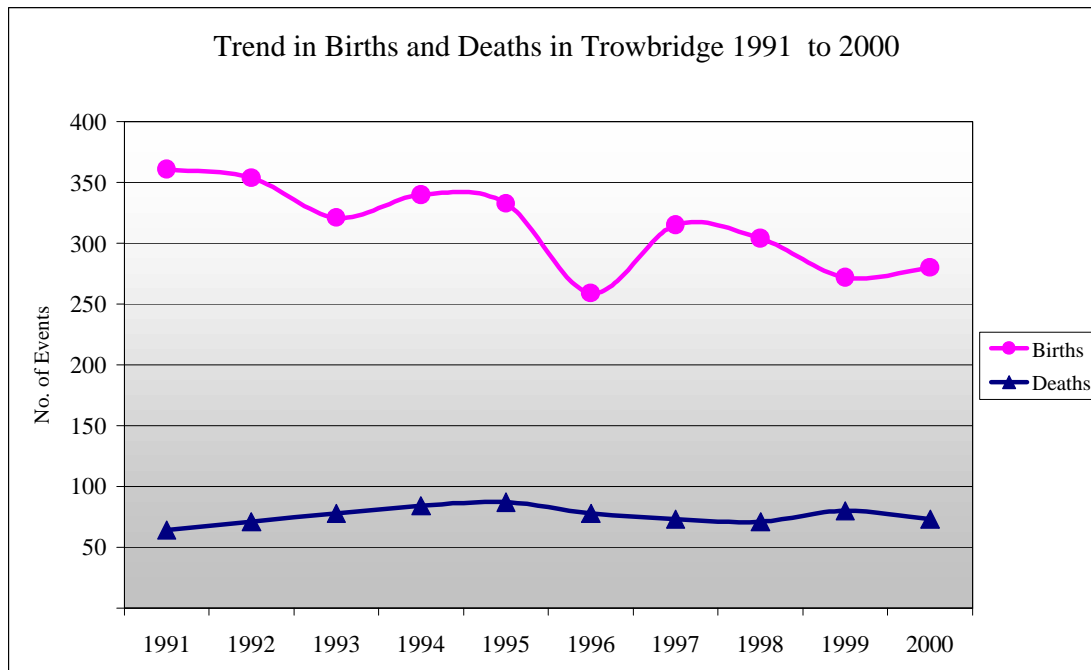


Splott - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	140	129	166	135	156	132	146	110	122	135	1,371
Births	199	228	209	221	236	212	209	218	218	222	2,172
Natural Change	59	99	43	86	80	80	63	108	96	87	801

Splott experienced positive natural change throughout the trend period with average natural growth of 80 per annum. Births peaked in 1996, as did deaths. During Time Period 2 there was an increase in natural growth of 18% over Time Period 1. Overall births represented 61.3% of events recorded from 1991 to 2000.

Natural Change in Splott			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Growth from Time Period 1 to 2
367	434	801	18.3

Trowbridge

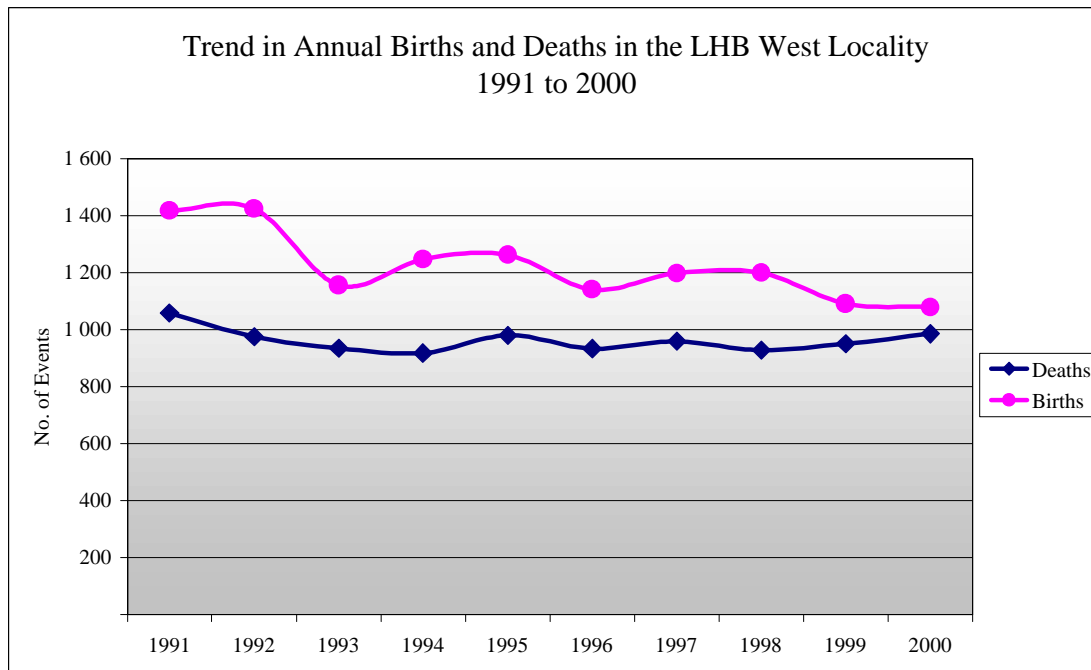


Trowbridge - Annual Births and Deaths 1991 to 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	64	71	78	84	87	78	73	71	80	73	759
Births	361	354	321	340	333	259	315	304	272	280	3,139
Natural Change	297	283	243	256	246	181	242	233	192	207	2,380

Trowbridge experienced very significant natural growth in population throughout the trend period. While deaths averaged 76 per annum births averaged a staggering 314 per annum. There was however a decrease in natural growth rates of approximately 20% from Time Period 1 to Period 2. Overall births represented some 80.5% of recorded events from 1991 to 2000.

Natural Change in Trowbridge			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
1,325	1,055	2,380	-20.4

West Locality

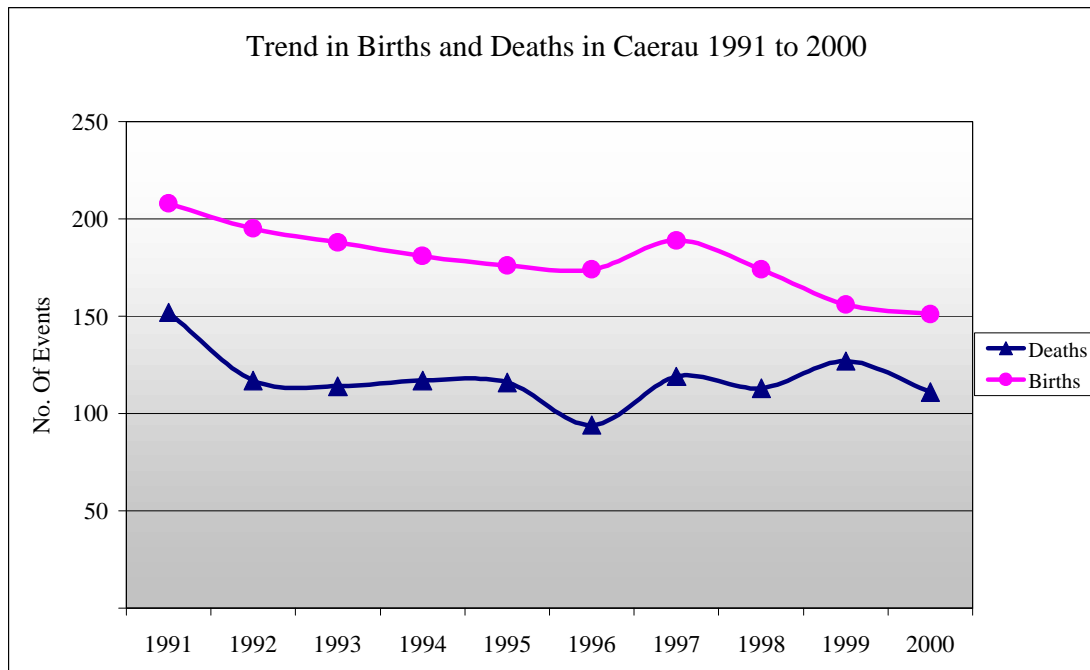


West Locality - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	1,058	975	935	918	980	934	959	928	951	986	9,624
Births	1,417	1,424	1,156	1,247	1,263	1,141	1,198	1,199	1,091	1,079	12,215
Natural Change	359	449	221	329	283	207	239	271	140	93	2,591

The West Locality experienced natural growth throughout the trend period with positive natural change in each year from 1991 to 2000. However the trends of births and deaths slowly converged during the trend period. Overall births represented 55.9% of recorded events from 1991 to 2000.

Natural Change in the West Locality			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
1,641	950	2,591	-42.1

Caerau

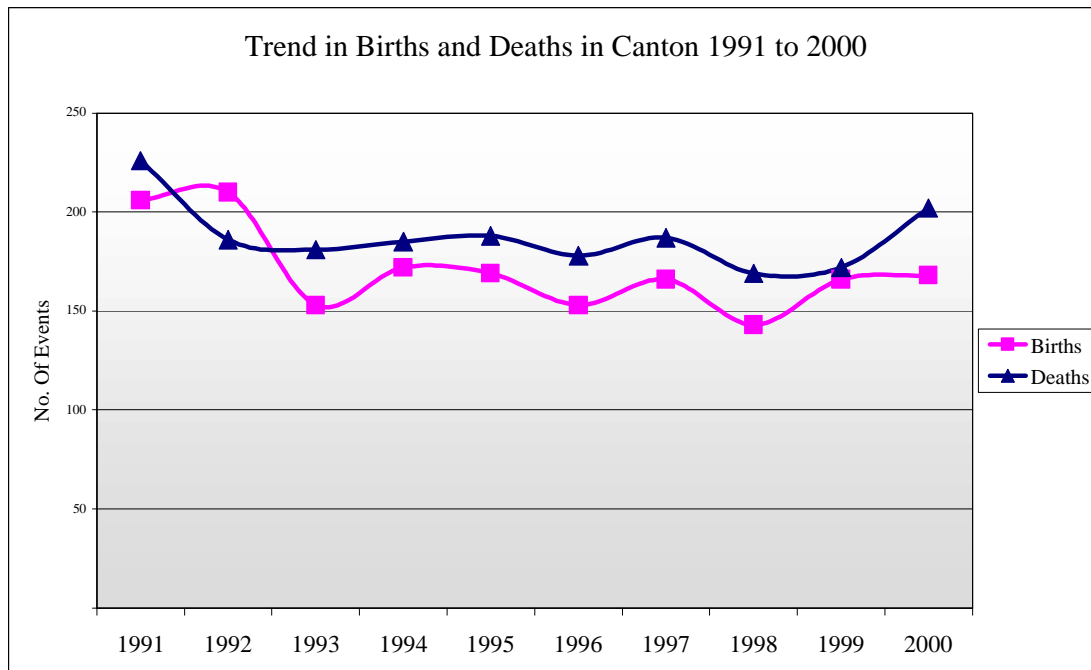


Caerau - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	152	117	114	117	116	94	119	113	127	111	1,180
Births	208	195	188	181	176	174	189	174	156	151	1,792
Natural Change	56	78	74	64	60	80	70	61	29	40	612

Caerau experienced natural growth throughout the trend period however annual births and deaths converged during Time Period 2 with a slight decrease in natural growth over Time Period 1 of some 8.5%. Overall births represented 60.3% of total events recorded from 1991 to 2000.

Natural Change in Caerau			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
332	280	612	-8.5

Canton

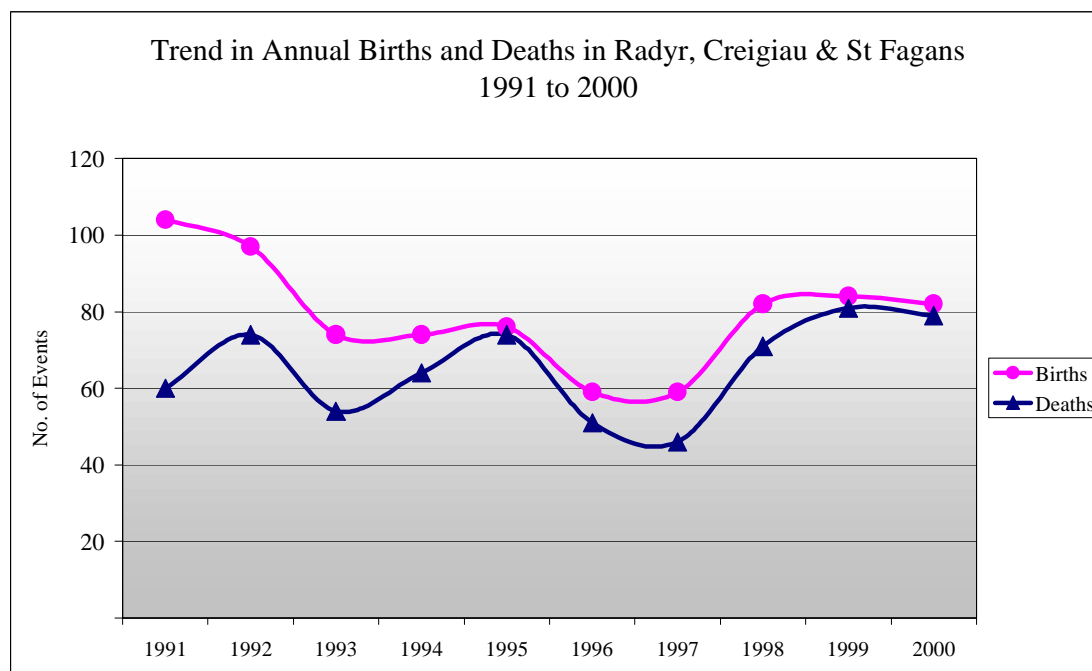


Canton - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	226	186	181	185	188	178	187	169	172	202	1,874
Births	206	210	153	172	169	153	166	143	166	168	1,706
Natural Change	- 20	24	- 28	- 13	- 19	- 25	- 21	- 26	- 6	- 34	- 168

Canton experienced natural decline of population during the time period with a natural increase recorded in only one year, 1992. There was a 100% increase in Natural decline from Time Period 1 to Time Period 2. Overall deaths represented 52.3% of all recorded events from 1991 to 2000.

Natural Change in Canton			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Increase in Natural Decline from Time Period 1 to 2
-56	-112	-168	100.0

Radyr & Morganstown and Creigiau/St Fagans (Combined)

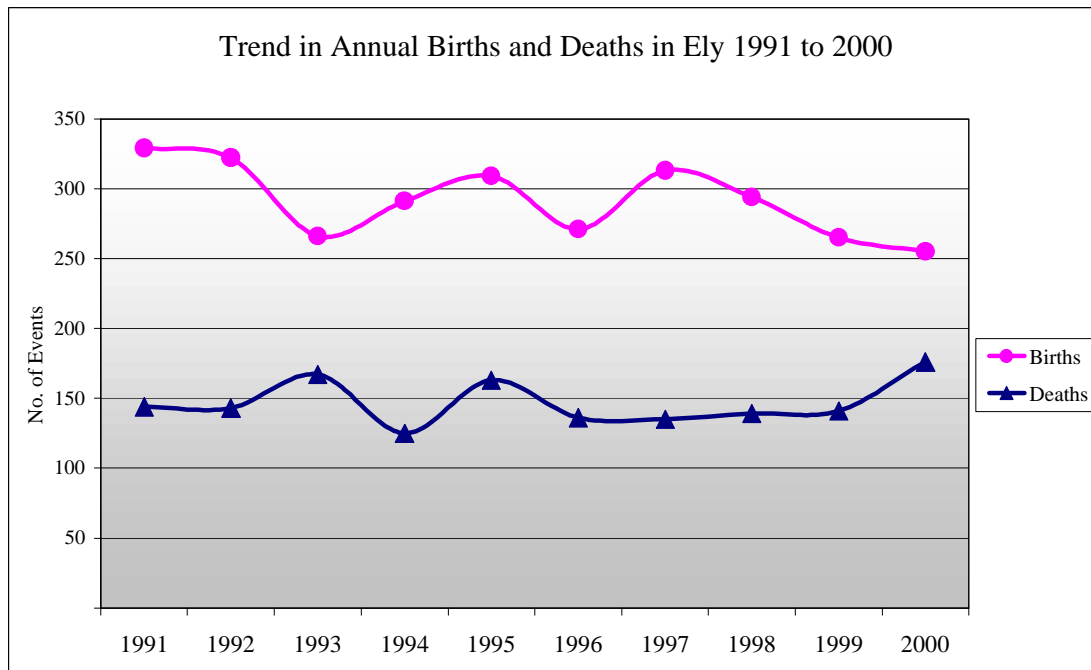


Radyr & Morganstown, Creigiau/St Fagans - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	60	74	54	64	74	51	46	71	81	79	654
Births	104	97	74	74	76	59	59	82	84	82	791
Natural Change	44	23	20	10	2	8	13	11	3	3	137

The composite geography experienced natural growth throughout the trend period, however the rate of growth declined by some 62% in Time Period 2. Fluctuating numbers of births and deaths converged during Time Period 2 as deaths increased and births decreased. Overall births represented 54.7% of all recorded events from 1991 to 2000.

Natural Change in Radyr & Morganstown and Creigiau/St Fagans			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
99	38	137	-61.6

Ely

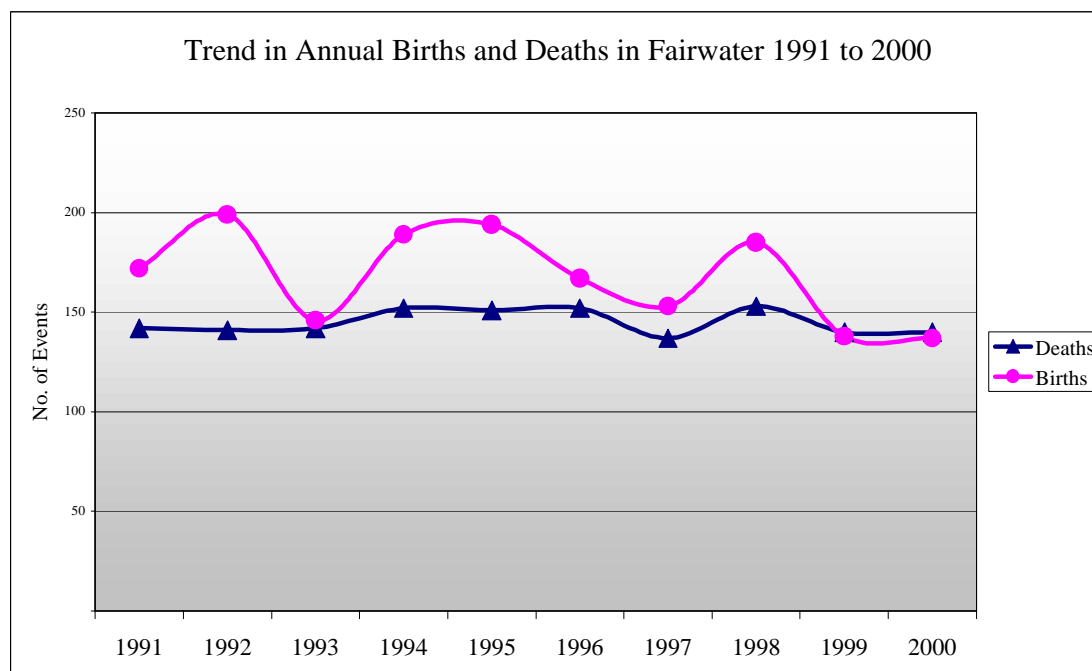


Ely - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	144	143	167	125	163	136	135	139	141	176	1,469
Births	329	322	266	291	309	271	313	294	265	255	2,915
Natural Change	185	179	99	166	146	135	178	155	124	79	1,446

Ely experienced significant natural growth throughout the trend period, however the growth rate decreased during Time Period 2 by some 13% over Time Period 1. It is however interesting to note that while births peaked in 1991 deaths peaked in 2000. While there is a definite downward trend in numbers of annual births the high number of deaths recorded in 2000 may be a statistical anomaly. Overall the number of births represented 66.5% of all recorded events from 1991 to 2000.

Natural Change in Ely			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
775	671	1,446	-13.4

Fairwater

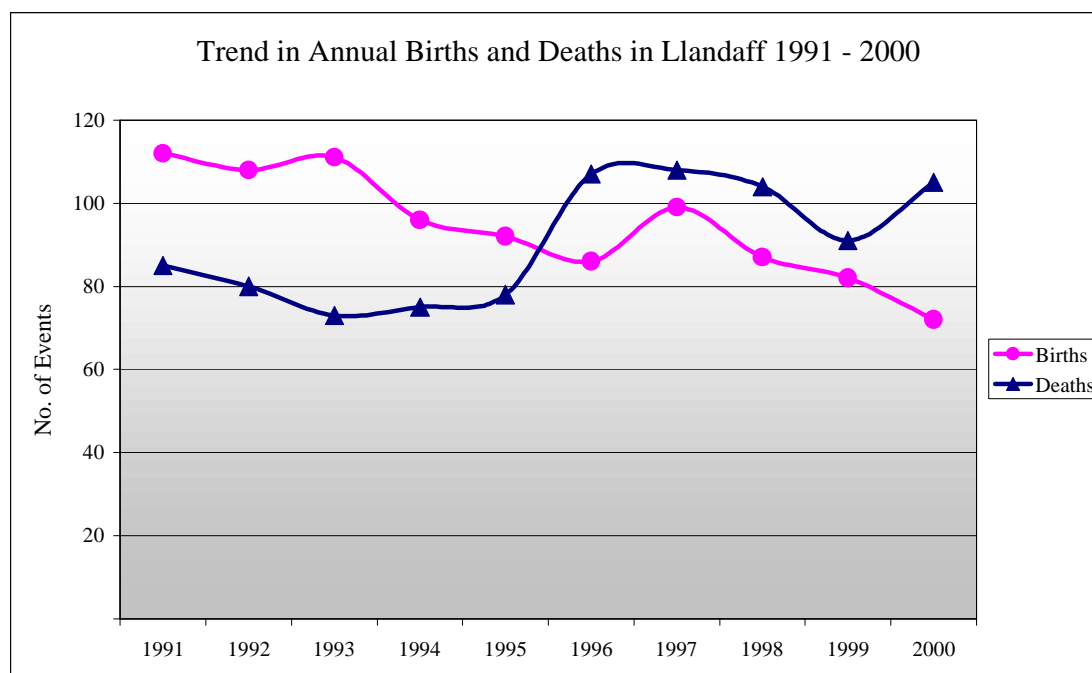


Fairwater - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	142	141	142	152	151	152	137	153	140	140	1 450
Births	172	199	146	189	194	167	153	185	138	137	1 680
Natural Change	30	58	4	37	43	15	16	32	- 2	- 3	230

Fairwater experienced natural growth overall, however this rate of growth declined by some 66% in Time Period 2 compared with Time Period 1. Births peaked in 1995 and deaths in 1998. Natural decline occurred in 1999 and 2000 as births fell but numbers of annual deaths remained more or less constant. Overall births accounted for 53.7% of total recorded events in Fairwater from 1991 to 2000.

Natural Change in Fairwater			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
172	58	230	-66.3

Llandaff

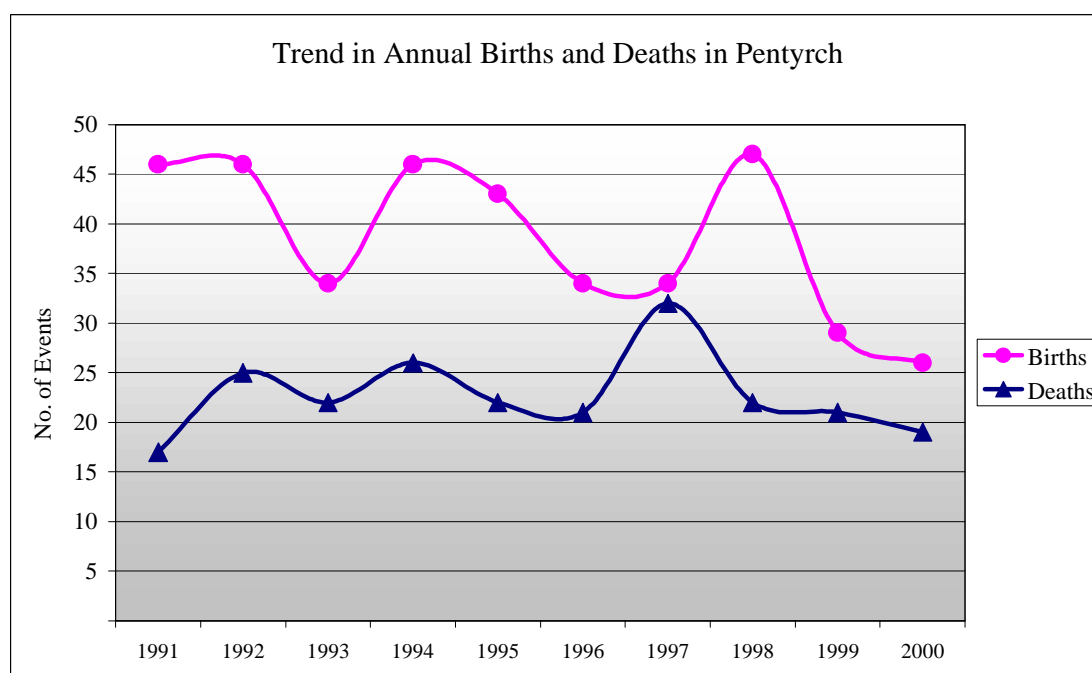


Llandaff - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Deaths	85	80	73	75	78	107	108	104	91	105	906
Births	112	108	111	96	92	86	99	87	82	72	945
Natural Change	27	28	38	21	14	- 21	- 9	- 17	- 9	- 33	39

Llandaff experienced a marginal overall natural growth during the time period. Positive natural growth in Time Period 1 was replaced by natural decline in Time Period 2 with an overall decrease of 169.5% between the two Time Periods. The trend in annual births declined steadily while deaths increased in Time Period 2. Deaths exceeded births for the first time in 1996. Overall births accounted for 51.1% of events recorded from 1991 to 2000.

Natural Change in Llandaff			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Change from Time Period 1 to 2
128	-89	39	-169.5

Pentyrch

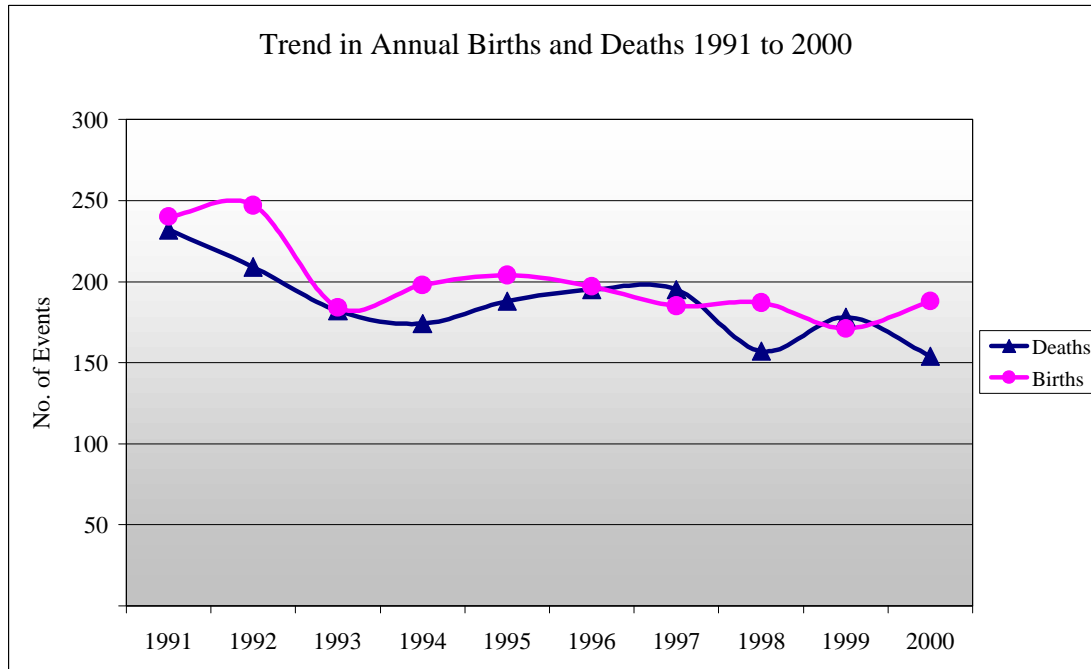


Pentyrch - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	17	25	22	26	22	21	32	22	21	19	227
Births	46	46	34	46	43	34	34	47	29	26	385
Natural Change	29	21	12	20	21	13	2	25	8	7	158

Pentyrch experienced natural growth throughout the trend period, however growth decreased by 46.6% from Time Period 1 to Time Period 2. The number of events recorded are very small mirroring the size of the population of the Electoral Division. Births represented 62.9% of the total events recorded from 1991 to 2000.

Natural Change in Pentyrch			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Growth from Time Period 1 to 2
103	55	158	-46.6

Riverside



Riverside - Annual Births & Deaths											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year Total
Deaths	232	209	182	174	188	195	195	157	178	154	1,864
Births	240	247	184	198	204	197	185	187	171	188	2,001
Natural Change	8	38	2	24	16	2	-10	30	-7	34	137

Riverside experienced marginal natural growth during the trend period, however the rate of growth decreased by some 44% from Time Period 1 to Time Period 2. There was a significant decrease in both annual births and deaths from 1991 to 2000. Numbers of deaths peaked in 1991 and births in 1992.

Natural Change in Riverside			
Time Period 1: 1991-1995	Time Period 2: 1996-2000	Total 1991 to 2000	% Decrease in Natural Change from Time Period 1 to 2
88	49	137	-44.3