

Isle of Wight JSNA Briefing Note: Teenage Conceptions

Teenage Conceptions – National Data

UK teenage conception rates are the highest in Europe. Teenage conceptions matter because the babies of teenage mothers are more likely to suffer from poor health; and because teenage mothers are more likely to leave education early and become trapped in poverty¹.

Under the previous Government there was a target to reduce the under -18 teenage conception rate in England, from the 1998 baseline, by 50% by 2010. Local reduction targets were set for individual Local Authorities – the Isle of Wight target reduction was **45%**.

The most recent data available, provisional data for 2010, was published in February 2012. The table below summarises the Isle of Wight trends over time.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
number of conceptions	87	87	101	91	104	83	81	92	92	94	96	75	83
rate of conceptions	40.2	39.6	43.3	37.9	41.6	33.8	32.1	36.0	35.1	35.2	37.0	30.4	34.2
change on previous year		1.5%	-(9.4%)	12.5%	-(9.6%)	18.6%	5.1%	-(12%)	2.5%	-(0.3%)	-(5.1%)	17.8%	-(12.5%)
change since 1998		1.5%	-(7.8%)	5.7%	-(3.4%)	15.9%	20.2%	10.5%	12.7%	12.4%	8.0%	24.4%	14.9%

represents
 -(increase)
 decrease

Data source: Office for National Statistics

¹ Teenage Pregnancy Strategy (Social Exclusion Unit, 1998)

Teenage Conceptions – National Data (continued)

IW: Number of Conceptions

The chart below shows the number of conceptions each year to women aged under 18. This includes both conceptions which result in a maternity and those which result in a termination.

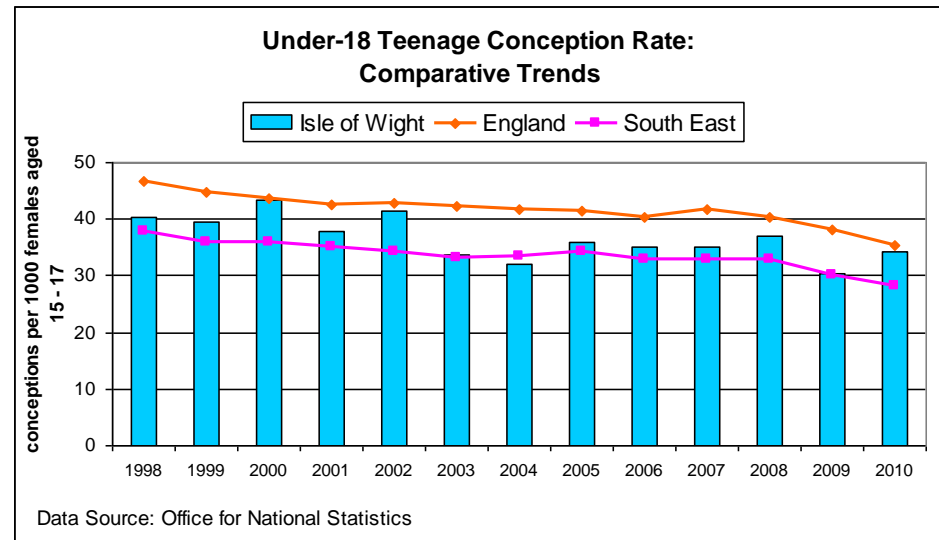
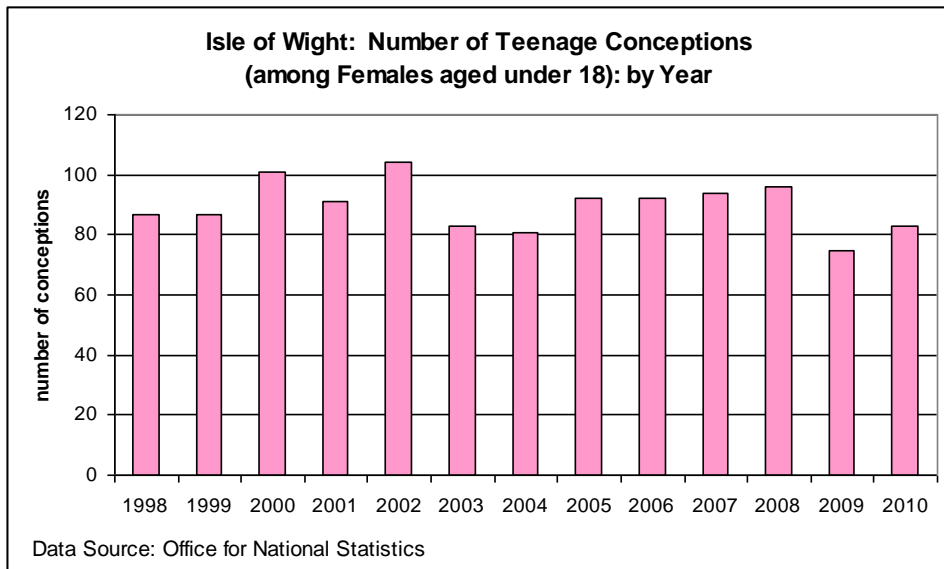
On average over this period there have been 90 conceptions each year in the under-18 age group. After a fall in 2009 to 75 conceptions, the lowest annual number since 1998, the number in 2010 increased again to 83, although this is still lower than the average for the period.

Comparative Conception Rates

The IW's increased number of conceptions in 2010 resulted in an increased conception rate.

Since 1998 the IW's conception rate has still fallen (improved) by 14.9%, but this is a smaller (less good) decrease compared with England and the South East.

The IW rate is now similar to the England rate and higher (worse) than the South East rate.



Teenage Conceptions – National Data (continued)

Quarterly Conception Trends

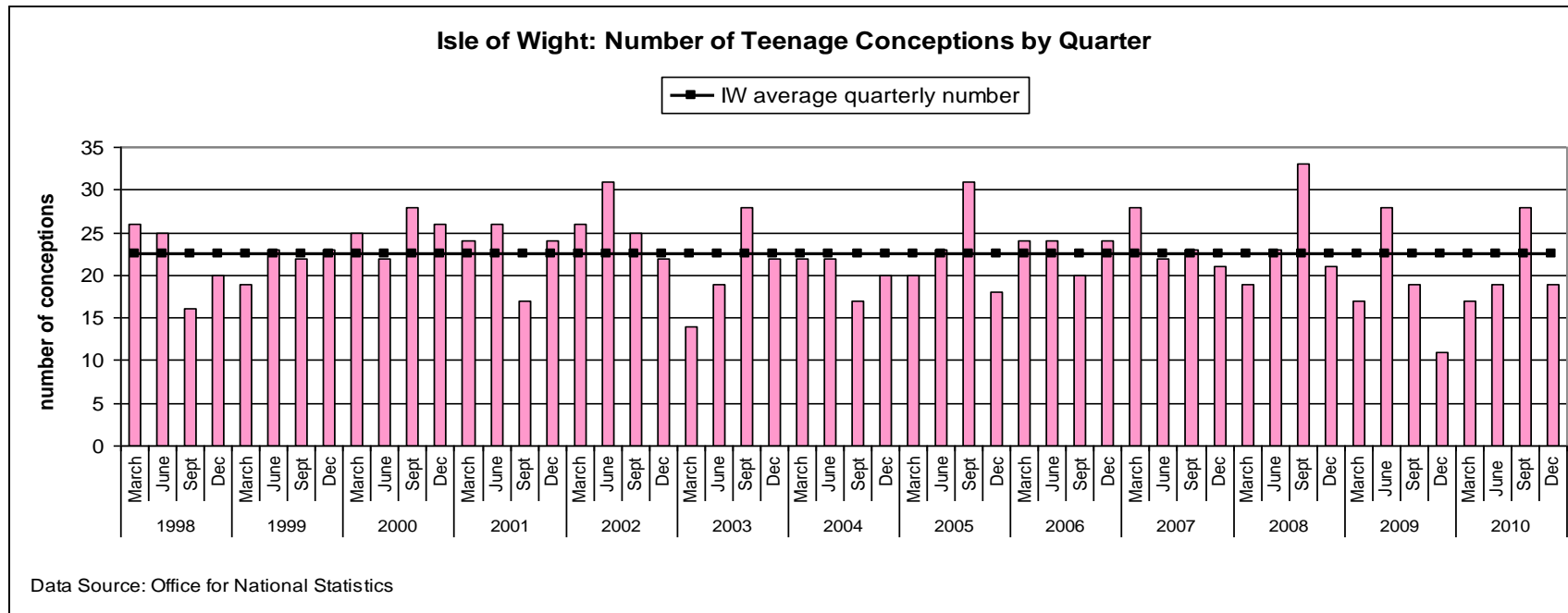
Number of Conceptions

The chart below shows the number of conceptions by quarter between 1998 – 2010. Over this period:

- The **average** number of quarterly conceptions was 22.
- The **highest** number of quarterly conceptions was 33 (Q3 2008).
- The **lowest** number of quarterly conceptions was 11 (Q4 2009).

In general there is considerable fluctuation in quarterly conception figures and no obvious pattern in terms of which quarters in the year have high / low numbers – see table below.

1998-2010 Aggregate	Q1	Q2	Q3	Q4	Total
total number of conceptions	281	307	307	271	1166
average number of conceptions	22	24	24	21	90

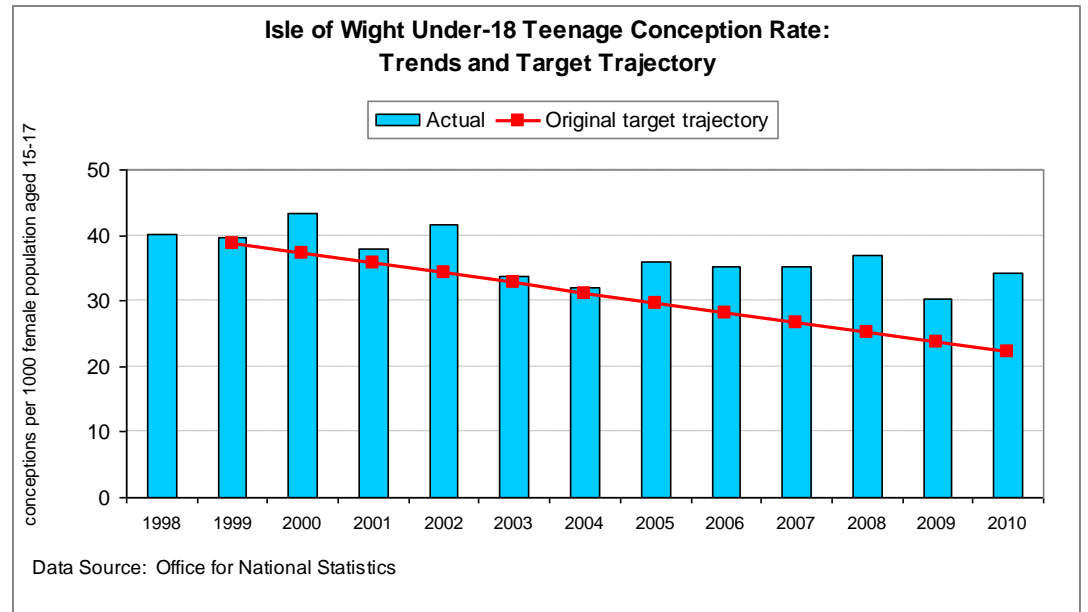


Teenage Conceptions – National Data (continued)

Performance against Target

The IW had a local target to reduce the Under-18 teenage conception rate by 45% from the 1998 baseline by 2010 – i.e., from 40.2 to 22.1 conceptions per 1000 female population aged 15-17.

The IW rate fell by 14.9% between 1998 and 2010 and therefore missed this target.



Teenage Conceptions – National Data (continued)

Teenage Conception – Ward Rates, 2006-08 – Correlation with Deprivation

The Office for National Statistics releases to Local Authorities the number and rate of teenage conceptions by electoral ward for 3-year pooled periods. However numbers under 5 are withheld by ONS, and publication of exact ward numbers and rates is not permitted. So the map alongside shows the wards with rates higher than the Island average for 2006-08, the most recent period available from ONS.

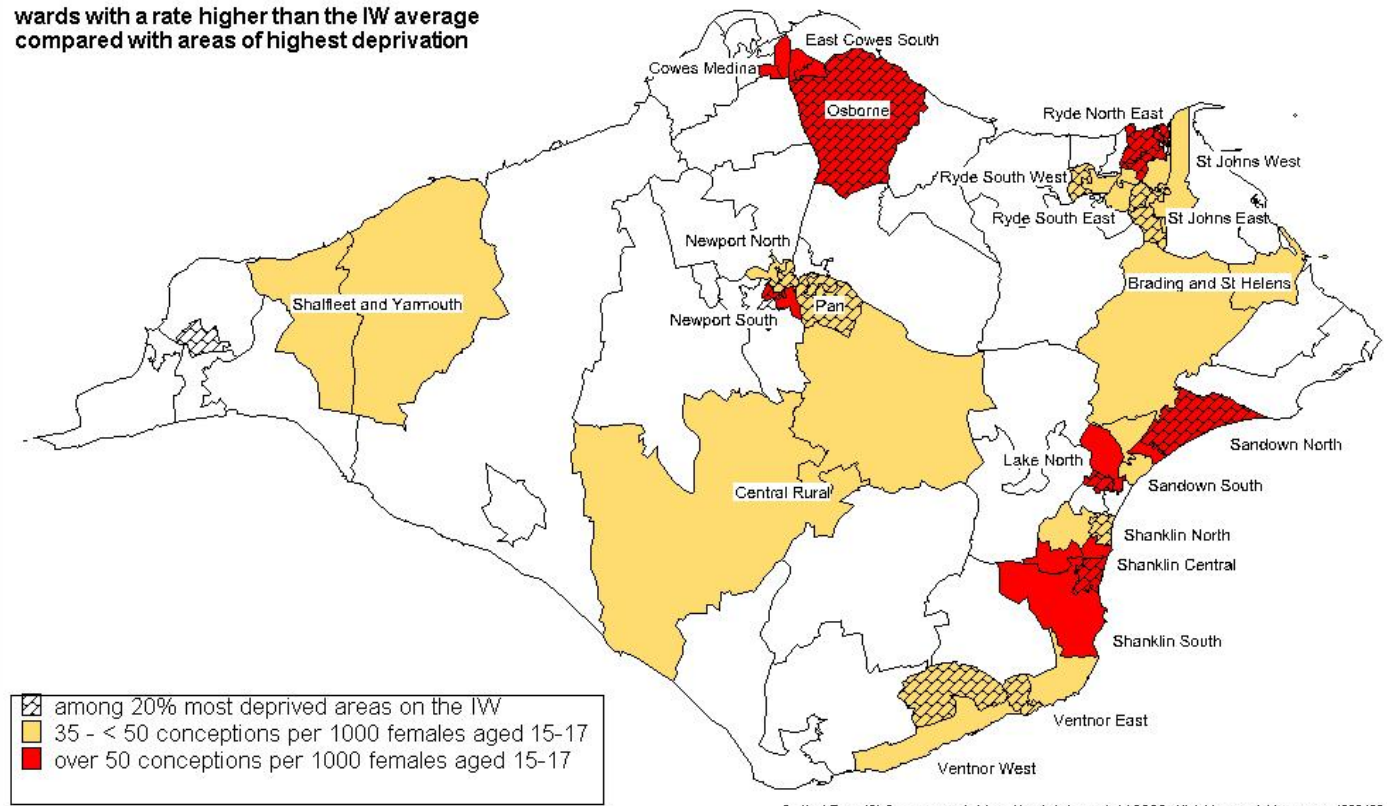
The highest rates (shaded red) are found in parts of Cowes, East Cowes, Newport, Ryde, Sandown, Lake and Shanklin.

The map shows the correlation between high teenage conception rates and areas of high deprivation, which are represented by the patterned areas on the map. See also the Lower Super Output Area analysis and map on pages 15-16.

Data Source: Office for National Statistics / Index of Multiple Deprivation, 2007

Isle of Wight Teenage Conception Rates by Ward, 2006-08

wards with a rate higher than the IW average compared with areas of highest deprivation



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Teenage Conceptions – National Data (continued): Termination of Pregnancy

According to the previous national Teenage Pregnancy Strategy, most pregnant teenagers are pregnant because of accidents, with around 75% of teenage mothers saying their pregnancies were unplanned.² Conceptions resulting in terminations are particularly likely to be have been unplanned. The data below shows the % of Island teenage conceptions which resulted in terminations.

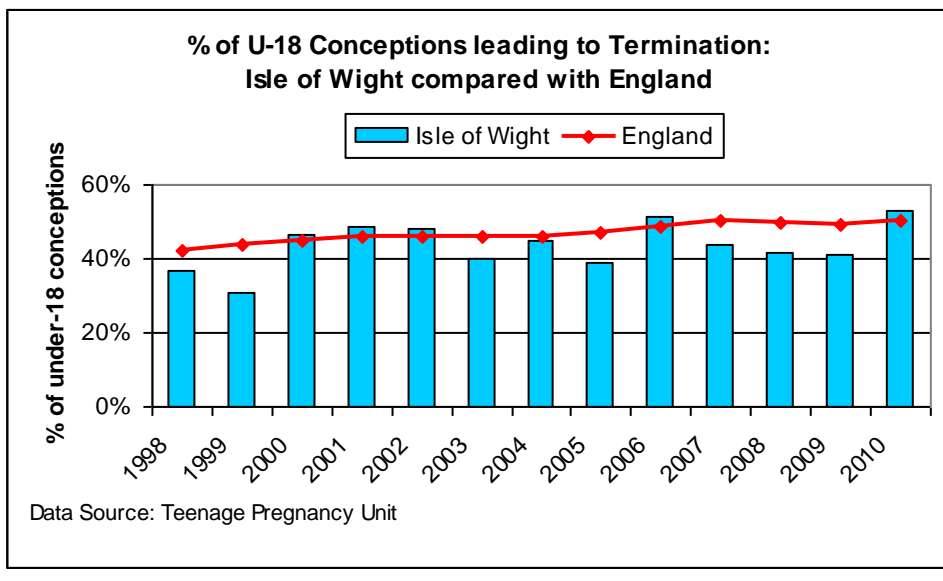
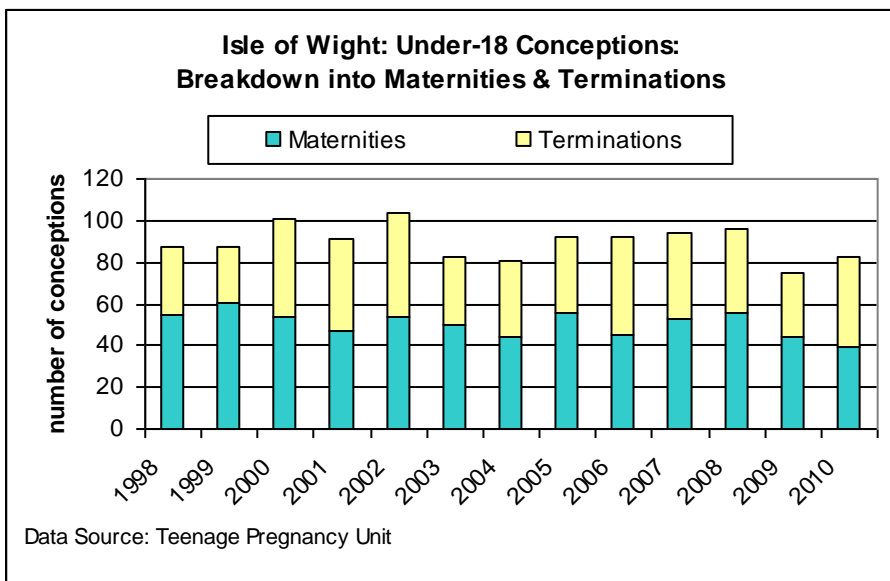
(Data source: Teenage Pregnancy Unit)

Isle of Wight Conceptions: Breakdown into Maternities & Terminations

The chart below shows IW conceptions by year, broken down into those which resulted in maternities or in terminations. There has been some year-on-year fluctuation, but over the whole period, 56% of conceptions have resulted in maternities, 44% in terminations.

% of Conceptions leading to Terminations: Isle of Wight compared with England

The chart below shows the % of conceptions leading to terminations, comparing the IW with England. In most years the IW rate has been lower than England's. However in 2010 there was an increase in the IW %, from 41.3% to 53%, and the IW rate is now higher than England's (50.3%).



² Teenage Pregnancy Strategy (Social Exclusion Unit, 1999)

Teenage Conceptions – Local Data

Background

National data about teenage conceptions derives from data about:

- (a) Maternities (births).
- (b) Terminations.

by women who, it is calculated, would have been aged under-18 at the time of conception. The timelag for maternities data in particular means that this national data is not published until 14 months after the end of the quarter / year in question.

Therefore, local data on maternity bookings and terminations is analysed to provide more timely local estimates of teenage conception trends.

It is important to note that this local data will not match exactly the official calendar year Teenage Conceptions data, calculated by the Office for National Statistics. Reasons for this include:

- The year in which a conception is counted could vary between local / national figures.
- Some maternity bookings might be followed by miscarriage or a subsequent termination.
- Some maternities booked on the Island might not be counted in the eventual official Island figures, if the woman leaves the Island before giving birth.

This data should therefore not be treated as a definitive prediction of what the official teenage conception statistics will state when published, but only as an indicative guide to local trends.

The table alongside compares national and local figures for the period 2007 – 2010 (the most recent year for which national data is available).

This shows that, overall over this period, 12 more conceptions were counted in local data compared with the national data, a variation of 3%. It is considered, therefore, that this local dataset is sufficiently accurate for use to monitor local trends and undertake more detailed analysis.

	2007	2008	2009	2010	Total
ONS official numbers	94	96	75	83	348
Local numbers	90	99	85	86	360
Difference - numbers	4	-(3)	-(10)	-(3)	-(12)
Difference - %	4%	-(3%)	-(13%)	-(4%)	-(3%)

Explanation of Difference

-(local numbers higher than TPU numbers)

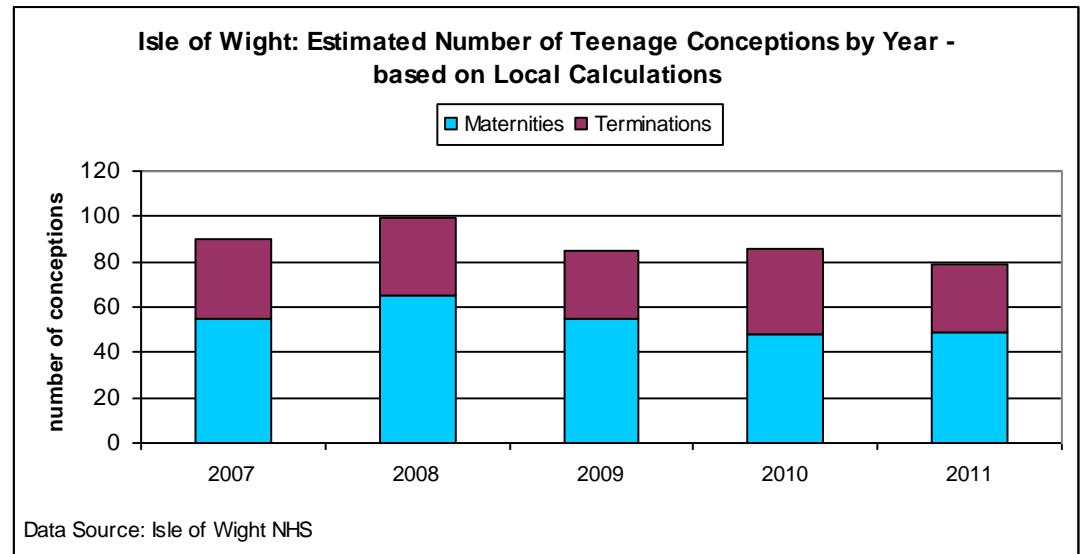
local numbers lower than TPU numbers

Teenage Conceptions – Local Data (continued)

Local Data Summary

The data analysed below is summarised in the table and chart alongside, which also includes 2011 data (the national data for 2011 will not be published until February 2013).

Estimated Conceptions	2007	2008	2009	2010	2011
Maternities	55	65	55	48	49
Terminations	35	34	30	38	30
Total Conceptions	90	99	85	86	79



Teenage Conceptions – Local Data (continued)

Local Geographical Analysis

Although the Office of National Statistics provides to Local Authorities ward-level teenage conception data (see page 6 above), publication of exact figures is not allowed, and small numbers (under-5) are withheld from Local Authorities. Local data therefore provides an opportunity for a more detailed understanding of the geographical distribution of teenage conceptions on the Island.

Because of the relatively small numbers of conceptions involved, such analysis needs to be presented with caution in order to comply with data protection requirements and avoid the risk that individuals could be identified from published data. Therefore, data has been analysed by:

- **Children’s Centre Catchment Area.** There are 8 Children’s Centres on the Island, whose catchment areas cover the whole of the Island (see map below). They provide convenient geographies for local analysis which addresses the ‘small number’ issues as above.
- **Local Deprivation Quintiles.** Based on the 2010 Index of Multiple Deprivation, the Island is divided into quintiles ranging from the 20% most deprived areas to the 20% least deprived areas on the Island (see map below).
- **Lower Super Output Areas (LSOAs),** small administrative areas with an average population of 1,500 people, provide the building blocks for both Children’s Centre Catchment Areas and Local Deprivation Quintiles. There are 89 Lower SOAs on the Island. A table and map are shown, highlighting the Lower SOAs which have had the highest **aggregate numbers** of teenage conceptions according to this local data analysis over the last 5 years (2007-11).

Teenage Conceptions – Local Data (continued)

Children’s Centres

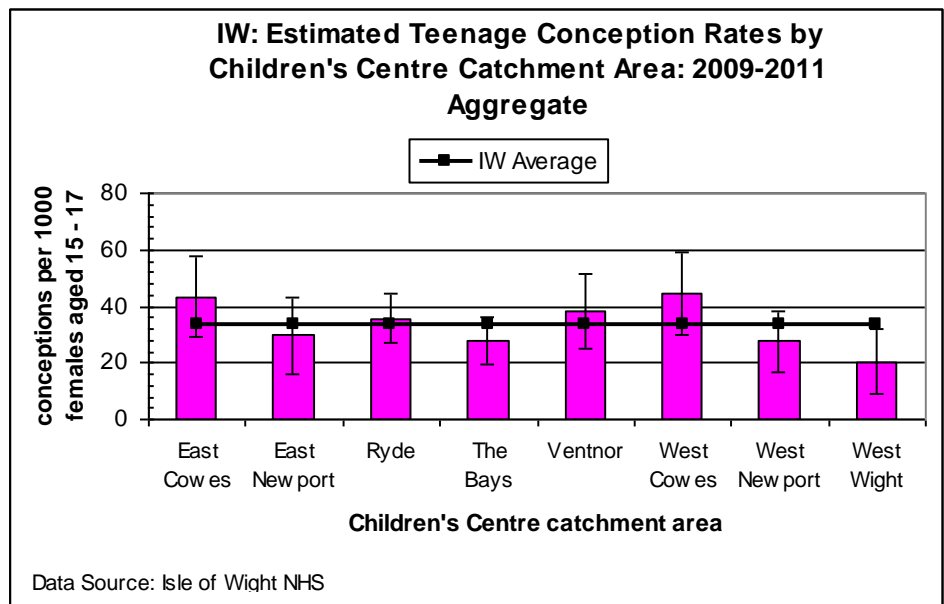
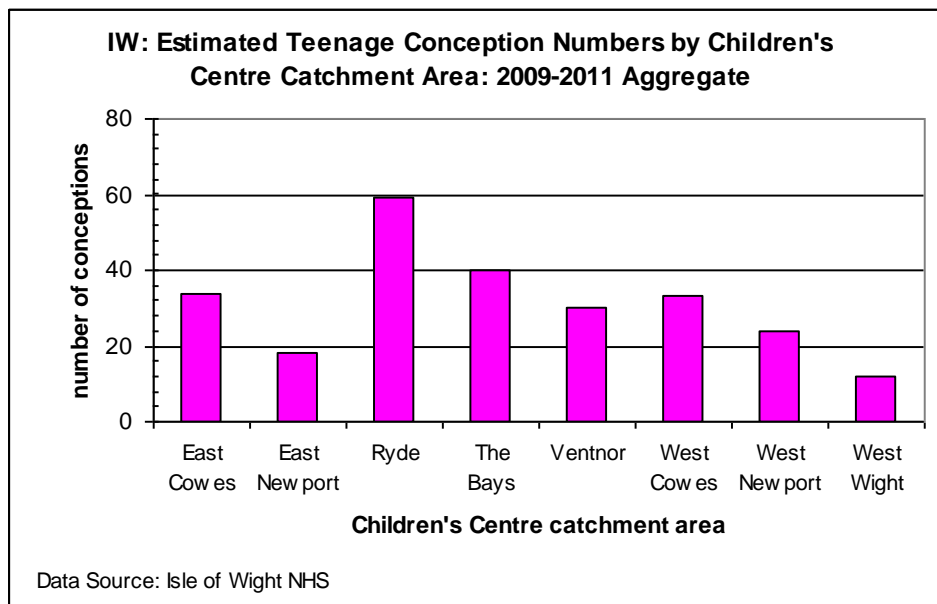
Local conceptions data for the period 2009 – 2011 aggregated has been analysed by the Children’s Centre catchment area in which the females who conceived were resident at the time of conception. A map showing these catchment areas is shown on the next page.

Number of Conceptions by Children’s Centre Catchment Area

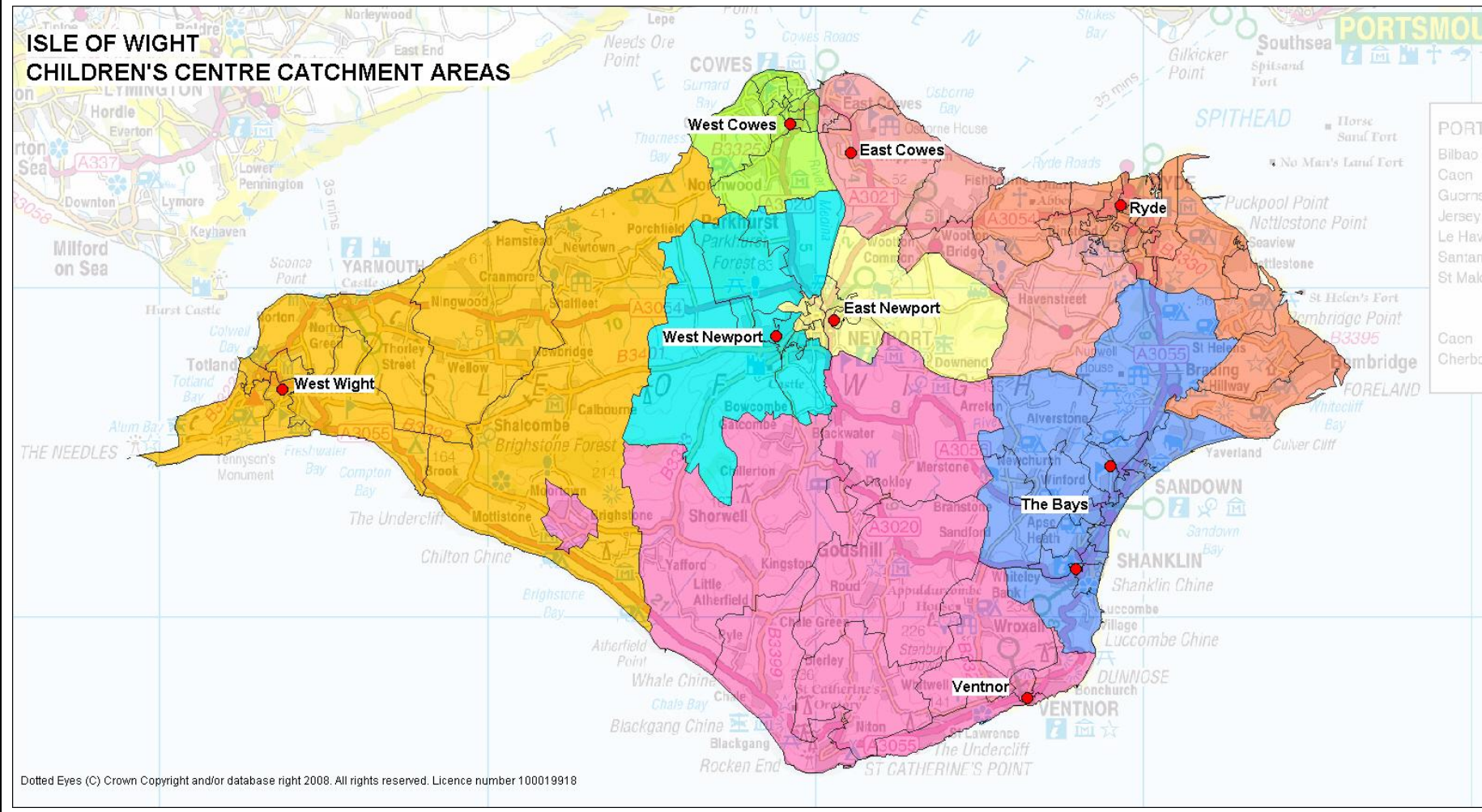
The chart below shows that the Children’s Centre catchment areas with the largest number of teenage conceptions over this period are Ryde and The Bays (which includes Sandown, Shanklin and Lake). 40% of all teenagers who conceived in this period were resident in these areas.

Conception Rates by Children’s Centre Catchment Area

The chart below shows that, when conception **rates** are compared, there is some variation among Children’s Centre catchment areas. However none of these rates is statistically significantly different from any of the others, nor from the Island average rate.



Teenage Conceptions – Local Data: Map of Children’s Centre Catchment Areas



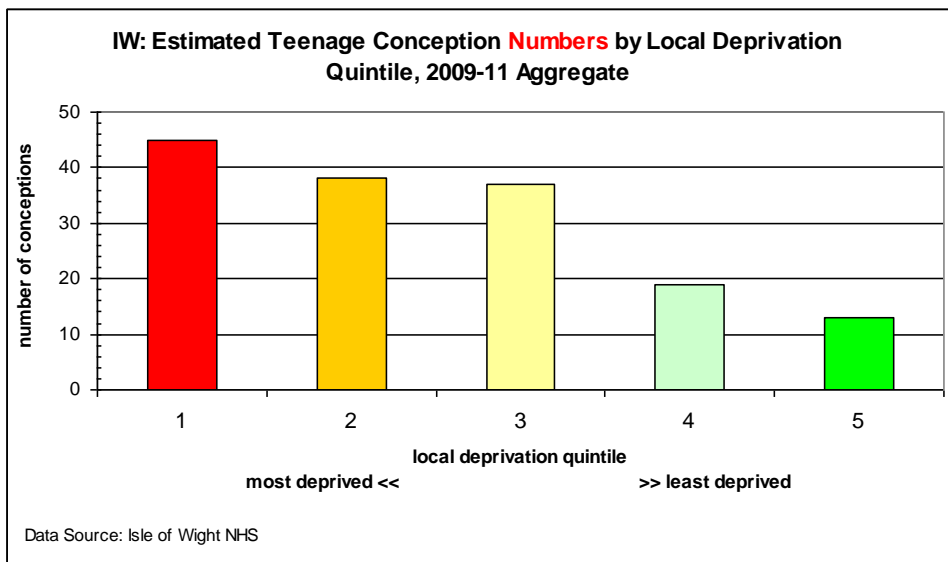
Teenage Conceptions – Local Data (continued)

Local Deprivation Quintiles

Local conceptions data for the period 2009 – 2011 aggregated has been analysed by the Local Deprivation Quintile in which the females who conceived were resident at the time of conception. This updated data shows a continuation of previous trends in terms of the association with deprivation.

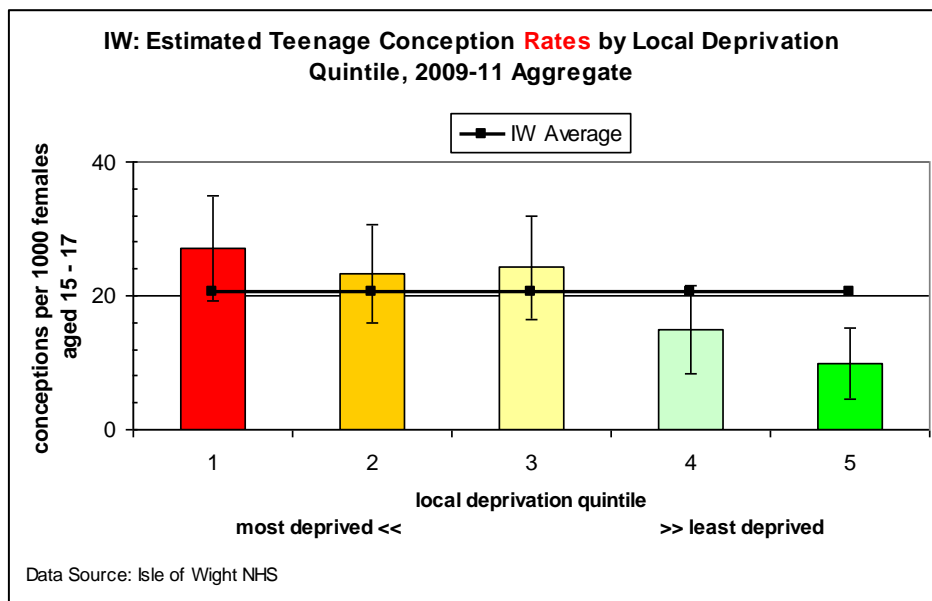
Number of Conceptions by Local Deprivation Quintile

The chart below shows a clear correlation between deprivation and teenage conception **numbers** – i.e. the more deprived the area is, the higher the number of teenage conceptions.

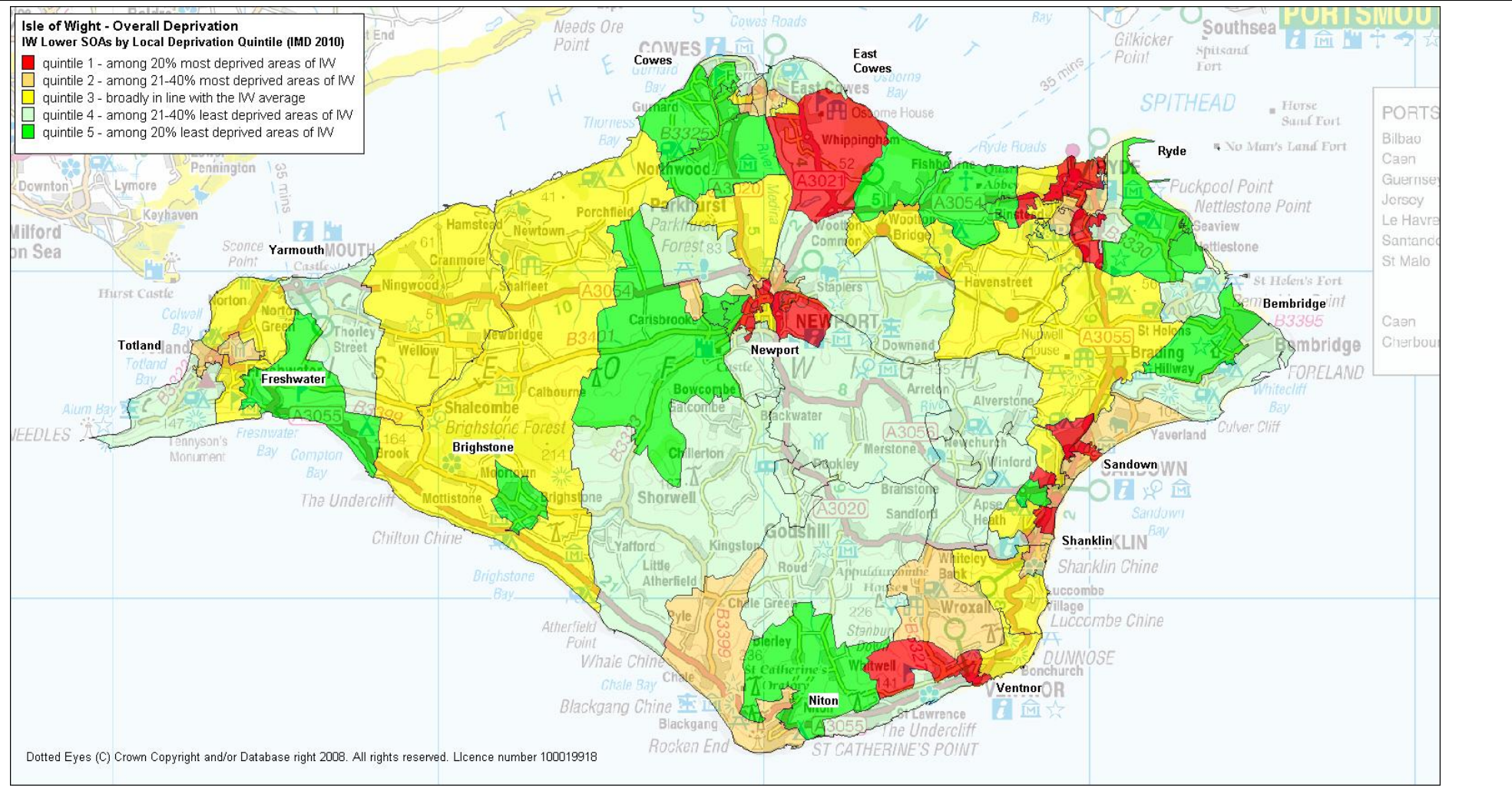


Conception Rates by Local Deprivation Quintile

The chart below shows a **very strong correlation** between deprivation and teenage conception **rates** – i.e. the more deprived the area is, the higher the rate of teenage conceptions.



Map of Local Deprivation Quintiles



Teenage Conceptions – Local Data (continued)

Lower Super Output Area Hotspots

Local conceptions data for the period 2007 – 2011 aggregated has been analysed by the Lower Super Output Area (LSOA) in which the females who conceived were resident at the time of conception.

The table alongside shows the Lower SOAs with 7 or more conceptions, in 2 categories. They constitute 25% of the Lower SOAs on the IW.

The map below shows these Lower SOAs mapped against the 30% most deprived Lower SOAs on the Island. The map demonstrates the overlap between areas with high numbers of conceptions and deprivation.

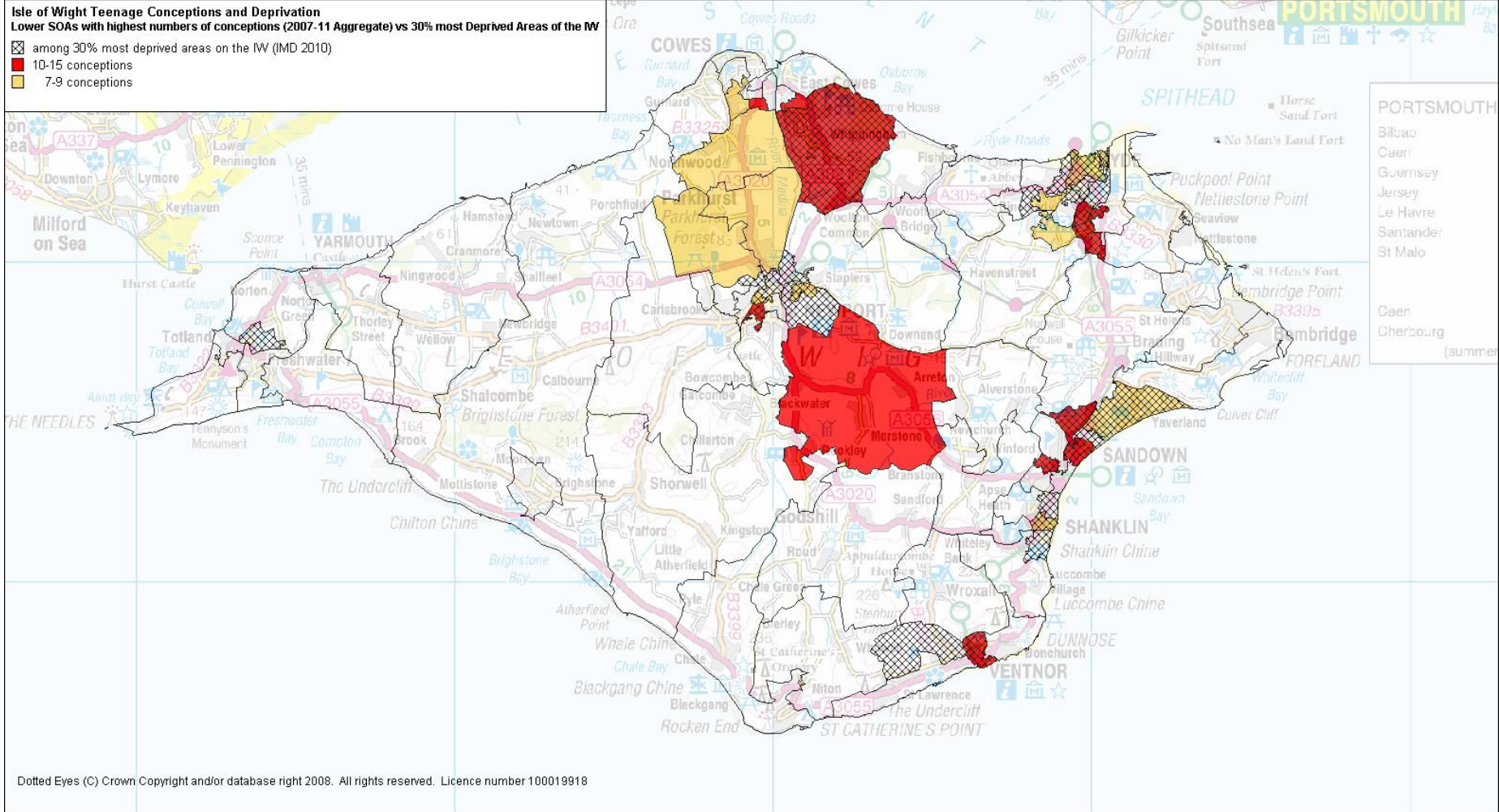
Although the map does not show an exact correlation, as noted above, the overall dataset shows a strong relationship between teenage conception rates and deprivation.

Lower SOA Code	Lower SOA Name	Number of Conceptions
E01017345	St Johns West A	10-15
E01017306	Cowes Medina B	10-15
E01017330	Osborne	10-15
E01017343	St Johns East A	10-15
E01017349	Sandown South A	10-15
E01017350	Sandown South B	10-15
E01017363	Ventnor East A	10-15
E01017296	Central Rural A	10-15
E01017308	East Cowes South A	10-15
E01017318	Lake North B	10-15
E01017322	Mount Joy B	10-15
E01017302	Cowes Castle West B	7-9
E01017329	Northwood	7-9
E01017333	Parkhurst A	7-9
E01017356	Shanklin Central B	7-9
E01017328	Newport South B	7-9
E01017342	Ryde South West B	7-9
E01017347	Sandown North A	7-9
E01017282	Ashey A	7-9
E01017332	Pan B	7-9
E01017334	Parkhurst B	7-9
E01017336	Ryde North East B	7-9

Teenage Conceptions – Local Data (continued): Map of Lower Super Output Area ‘Hotspots’ compared with Deprivation

Isle of Wight Teenage Conceptions and Deprivation
Lower SOAs with highest numbers of conceptions (2007-11 Aggregate) vs 30% most Deprived Areas of the IW

- ☒ among 30% most deprived areas on the IW (IMD 2010)
- 10-15 conceptions
- 7-9 conceptions



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