

# Norman Churches, Domesday Population and Parish Formation

*John Wand and Kathryn Wand*

*Parishes developed between 10th–12th centuries. Concurrently there was a ‘great rebuilding’ of parish churches which saw them increasing in size. It has long been assumed that the principal reason for this change is that parish churches were built to accommodate all of their parishioners. This transition occurred across western Christendom, but England is unique in having a detailed record of population from this period in the Domesday Book, making it possible to test this assumption. This paper builds on the limited work to date by studying Wiltshire in detail. An analysis of 53 churches with surviving Norman fabric shows that there is a high degree of correlation between Domesday population and nave area for aisleless churches. This observation has also been shown to apply to a number of other counties. Further considerations show that this relationship was indeed to enable all parishioners to attend at least some services. The work also suggests that aisles were not primarily used for accommodation, and that an early date may be posited for parish formation.*

## **Introduction**

A parish can be defined as a self contained and self sufficient unit of ecclesiastical administration and pastoral care, based upon a resident priest and associated church (Blair 2005, 426). The system of parishes began to evolve in the late Anglo-Saxon period and extended over most of England by the end of the 12th century (Morris 1989). Concurrent with this process there was a ‘great rebuilding’ of parish churches (Gem 1988) which resulted in them becoming significantly larger than their Anglo-Saxon predecessors, as well as being built in stone rather than wood. It has long been assumed that one of the main drivers for this change was the need for parish churches to accommodate all of their parishioners (eg Godwin 1857; Bond 1913, 195; Taylor 1978, 1031), this factor being amplified by a significant increase in population over the period (Hatcher 1977). This transition occurred across western Christendom, but England is unique in having a detailed record of population from the period in Domesday Book. It would seem to be worthwhile to attempt to validate the general

assumption of the relationship between population and church size by using Domesday figures.

In practice this comparison has been little studied. Proudfoot (1983) covered the topic in passing as part of his study of the change in floor area of parish churches in medieval Warwickshire between 1200 and 1535, and its relationship to trends in population. Morris (1989, 287–290) shows graphically the growth in area of naves in 60 local churches in use between 1050 and 1150, but does not relate this to the Domesday population. Bond (1988) compared floor area and Domesday population for 29 churches in Worcestershire. This work has attracted criticism (Stocker 1990; Boddington 1990) and has also gained some qualified support (Blair 2005, 457), but has not been repeated. This article aims to provide more evidence on this topic by carrying out a detailed study of Norman parish churches in Wiltshire.

There are several reasons for choosing Wiltshire: it is a reasonably large geographic unit, whose boundaries have changed relatively little since the middle of the 11th century. There is good documentary coverage, in particular in Domesday and Victoria County History (VCH). The county was one of the wealthiest in

Domesday England (McDonald and Snooks 1986, 83) and so might have had the resources to be at the forefront of the 'great rebuilding'. Wiltshire suffered relatively little from the effects of the Norman Conquest, so there should be few disruptions in population growth or building due to this event. In addition Wiltshire in the medieval period lay entirely within the Diocese of Salisbury, thereby negating any possible effects due to policy differences between dioceses.

## Background

### *Medieval Population trends*

Domesday Book figures relate to a specific date, 1086. The churches studied were built between 1060–1200, so changes in population across this period need to be considered. Population estimates for this period are imprecise and the subject of much study. The starting point for these studies is Domesday Book, which enumerates only heads of households rather than all inhabitants. Conversion of these figures into total populations is the subject of much debate (Darby 1977, 57–94; Hinde 2003, 15–19). Further data comes from a range of sources such as Tax Returns, with another major source of figures being the poll tax returns for 1377. The consensus from this work is that, across the country, there was a massive increase in population between the 11th and early 14th centuries (Hinde 2003, 22–37; Miller and Hatcher 1978, 28). It should also be noted that there was significant variation at regional and local level due to a range of factors.

### *Parish formation*

The parish system in England is considered to have evolved from the preceding ecclesiastical lay provision which primarily consisted of a series of minster churches alongside an increasing number of proprietary or manorial churches (Blair 2005). Parish formation, particularly in Wiltshire, is acknowledged to have been a prolonged and complex process (Draper 2006, 84). Such is the degree of complexity and lack of clear record that there is no well defined end point to this process, although it is accepted that this occurred at different times across England. Many scholars, particularly historians, consider parish formation to have concluded by the end of the 11th century (Morris 1989, 147–8), whilst Blair (2005, 498–503) suggests that the process of parish formation was still ongoing around 1100 and some archaeologists favour a date towards the end of the 12th century (Draper 2006, 84). The VCH for Wiltshire considers that 'the main work

of organising the parish system in the county was done by the men of the twelfth century' (Templeman 1956). Based on documentary evidence such as charters, Pounds (2000, 31) suggests that there was a very active programme of church foundation in the period 50 years following the Norman conquest, which he associates with an in-filling of the church coverage established by the late Saxons.

### *Archaeological evidence for church building*

Parish churches have seldom been the subject of a comprehensive modern archaeological excavation of the sort needed to reveal the evolution of the building (Rodwell 1989). There are no substantive examples from Wiltshire. Three notable exceptions from other counties are briefly discussed.

1] *St Mary's, Rivenhall, Essex* was excavated by Warwick and Kirstie Rodwell between 1971 and 1973 (Rodwell and Rodwell 1985). This revealed a sequence of churches on the same site with an initial timber building being replaced by a substantial two-cell Saxo-Norman stone church of the 10th to 11th century. It is thought that the small original timber building was a proprietary chapel; this was succeeded by a larger timber building before being replaced in turn by an even larger stone structure in the 10th century. The early date of the stone church suggests that parish formation occurred relatively early in Rivenhall.

2] *Wharram Percy, Yorkshire* is the classic deserted medieval village that was excavated over a 40-year period from 1950 by John Hurst and Maurice Beresford (Beresford and Hurst 1990). Their excavations included the redundant parish church of St Martin (Bell and Beresford 1987). Here again the excavations revealed a sequence of churches with a small timber church being replaced by a small two-celled stone church, which was in turn succeeded by a large two-celled stone built church being built in the mid-12th century. This is seen as being the first parish church and the authors suggest that it indicates the date of parish formation. It is also assumed that this was built to accommodate all parishioners and to have replaced a series of smaller churches distributed across the parish (Beresford and Hurst 1990, 88).

Both of these examples demonstrate the typical evolution of a church from a small timber proprietary

church to a larger stone built parish church by the 10th to 12th century.

3] *The third case, Raunds, in Northamptonshire*, is different. Here Andrew Boddington (1996) excavated two successive stone churches and their associated churchyard in the late 1970s. The second church was built in the late 11th to mid-12th century and converted to secular use by the end of the 12th century. The first church is considered to have been a proprietorial church; it is not clear what the status of its successor was. The relationship between the area of these churches and their Domesday population is considered below.

### *Liturgy and the use of space*

Churches were built as places of worship and their architecture and internal layout were designed to support this. Liturgical practices have varied with time and this is reflected in changing layouts, some of which can be observed from physical remains. However, there is little evidence for liturgical practices in the Norman period, either from material remains or the written record. This is reflected in the paucity of academic literature on the subject; Pfaff (2009) provides the most recent analysis, but this is based on texts and focuses on practices in cathedrals and monasteries. Such literature as does exist on physical evidence focuses on the position of the altar. The most recent discussion is by Barnwell (2004), building on the work of Parsons (1996), Morris (1989, 293–5) and Taylor (1978, 1022) amongst others.

There is a general consensus, based in part on archaeological evidence from excavations such as at Raunds, that the altar in the Anglo-Saxon period was sited at the east end of the nave. Over time the altar moved to under or just inside the chancel arch and then towards the east end of the chancel (Rodwell 1989, 131). Another trend was towards elaboration of the liturgy (Pounds 2000, 382), with an increasing reverence for the Host and the rise in importance of belief in transubstantiation, which ultimately became a Doctrine at the Fourth Lateran Council in 1215 (Barnwell et al 2005, 127). This placed more importance on the congregation being able to see the Elevation of the Host. At the same time other aspects of the reform movement increased the differentiation between clergy and laity (Barnwell 2004, 55).

These considerations were used by Morris (1989, 293–5) to postulate the preferred area in the nave

for use by the congregation. Figure 1 is based on this work. Graves (2000) has taken this approach further, producing a series of viewsheds for the interiors of 14th- and 15th-century churches in Devon and Norfolk. Her hermeneutic approach indicates that at this period there were significant differences in liturgical practice between these areas, a reflection, in part, of the different balance between secular and episcopal control of parish churches in the two dioceses. Whilst liturgical practices might also have differed in the Norman period, there has been no work that questions the assumption that during the medieval period the church was universal and that all parishioners were expected to attend at least some church services.

*Fig 1*  
*Area development and use of space in a parish church; a around 1150, b mid-13th century; stippled: area most convenient for congregational use at the moment of elevation of the host. Based on Idmiston Church (the position of the font is hypothetical) (after RCHME 1987, 146 and Morris 1989, 294).*

### *Aisles*

Aisles began to appear in churches from the late Norman period (Morris 1989, 291; Cox 1954, 87): for example, a south aisle was built in Phase V at Wharram Percy in the late 12th century. The role of aisles has been the subject of some debate: Proudfoot (1983) considered that their function was primarily to provide additional floor space for parishioners. His statistical analyses for Warwickshire showed that there was a

*pronounced space-time coincidence between periods of maximum floor area extension and maximum population growth, suggesting that population pressure may have been a major determinant of church size*  
(Proudfoot 1983, 231).

One weakness of Proudfoot's approach is that he only considered population changes in general terms. Morris (1989, 289–293) challenged this correlation, noting that populations fluctuated on a local basis irrespective of general trends. He considered that factors such as wealth, liturgy, comfort and practicality were more important. Pounds (2000, 384–5), has similar doubts, but concedes that a relationship between population and church area could apply at county level.

## *Results and Analysis*

### *Methodology*

It is generally recognised that Domesday does not give a complete record of churches extant in 1086, and Wiltshire is no exception (Templeman 1956; Draper 2006, 79). Instead, an initial list of all churches in Wiltshire with a significant amount of surviving Norman fabric was made from Pevsner and Cherry (1975), and was cross-referenced against the Domesday record for Wiltshire (DB). This indicated that there were some places with Norman churches, but no population record (eg Devizes), and a larger number of Domesday settlements where the church had been (re)built after the Norman period. A set of some 60 candidates was then subjected to detailed scrutiny. Floor area was taken from three main sources: the literature, in particular RCHME (1987) and the Wiltshire Archaeological Magazine; 19th-century faculties available in Wiltshire Record Office or at [www.churchplansonline.org](http://www.churchplansonline.org), by site visits, or a combination of these approaches. Whilst plans from the literature generally gave the date of the building, faculties did not, and recourse to either literature or site visits was needed. This also acted as a check on

the somewhat terse entries in Pevsner and Cherry (1975). Most information came from the VCH (the earlier volumes of which also provided the basis for Pevsner and Cherry), supplemented by church guides and personal observation. This helped to reveal cases where a nave or aisle had been extended in the post Norman period (eg Langley Burrell), or where original Norman features, typically doorways, had been recycled into later structures (eg Wroughton). As very few of the churches have been the subject of modern archaeological investigation their dating was on the basis of architectural typology. Under this system it is usually only possible to date a Romanesque feature to the Norman period (1060–1190), although transitional phases between Saxon and Norman (Saxo-Norman or 'overlap') and Norman and Early English ('Transitional') can yield dates in the regions of 1050–1100 and 1150–1200 respectively. Whilst this stylistic approach has been criticised for its lack of precision, it is the only systematic dating methodology currently available (Taylor 1978; Fernie 2000).

'Population' figures were taken from Domesday Book (DB). For the comparative purposes of this study, head of household figures have been used as a proxy for 'population'. A more serious issue is that Domesday population figures are given by estate, and there is not always a direct correspondence between estate and ecclesiastical parish, particularly as in 1086 the latter may still have been in process of forming. The assumption has been made that the parish population figures comprise the sum of all those Domesday estates known to lie within the later parish boundary. This approach has meant that some churches have had to be discounted where it is known that the Domesday estate encompasses more than one parish (eg the Bishop of Winchester's estate at Downton which includes Bishopstone). The VCH provided most of the necessary information; other literature was used for parishes not currently covered by the VCH. In other cases examination of the Domesday figures indicated serious problems with them, usually because they were very low, and such examples were also discounted.

This detailed study yielded 53 Norman churches; this represents, as far as can be ascertained, the complete corpus of possible candidates. To this was added nine Anglo-Saxon or 'overlap' churches and 11 Early English churches for comparative purposes. The 53 parishes comprise about 26% of the total recorded Domesday population of Wiltshire, or about 20% of the parishes listed in the 1535 Valor Ecclesiasticus (VCH). From the distribution of churches there is

reasonable coverage of all areas and geological zones of the county; most of the churches were rural ones. Literature was also used to collect information on a number of other factors including parish area, the owner of the manor(s) and the patron of the advowson. A detailed list of the churches is given in the Appendix.

### Analysis

Population was plotted against floor area in a series of scatter plots. This visual presentation was accompanied by a statistical analysis. The Spearman correlation coefficient,  $r_s$ , was calculated for each data set. This statistical test is used to determine the degree to which the distribution of points on a scatter graph reflects a correlation between the two measures being plotted. The test measures the correlation between the ranking of a set of data according to two measures where no parametric relationship is assumed. The calculated value,  $r_s$ , lies between 0 (indicating no correlation) and 1 (perfect correlation). In practice, perfect correlations are not found and the correlation is expressed as a confidence level; at the 1% level, there is less than 1% likelihood that the distribution of points is random. Tables are used to see how close the calculated  $r_s$  value equates to a correlation, the requisite value of  $r_s$  being dependent upon the number of datasets, so that the larger the number of datasets, the lower is the requisite value of  $r_s$  (Spearman 1904; Shennan 1997, 145). This approach was also adopted by Proudfoot (1983).

The first analysis is for the complete set of 53 churches (Fig 2); this shows a reasonable degree of correlation between population and area of nave which is confirmed by an  $r_s$  of 0.607, which is significant at the 1% confidence level.

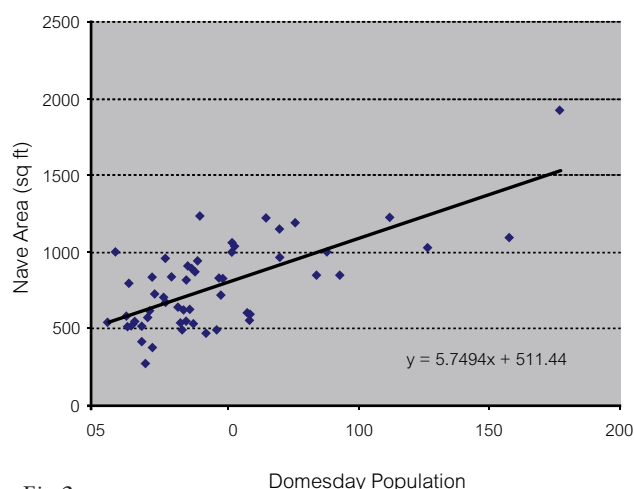


Fig 2  
Relationship of Domesday population to nave area for Norman churches in Wiltshire

This result can be compared to a similar analysis for Norman churches in Warwickshire, where Proudfoot's analysis also yielded a value for  $r_s$  which was significant at the 1% confidence level (Proudfoot 1983, 243). As Proudfoot's paper does not include a summary of the

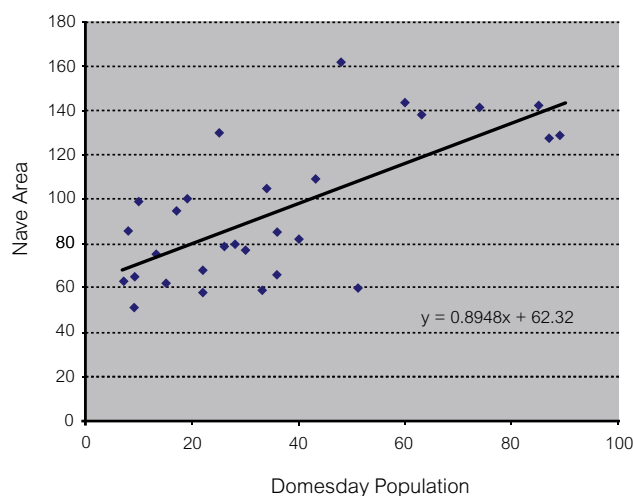


Fig 3  
Relationship of Domesday population to nave area for Norman churches in Worcestershire (data from Bond 1988)

data used, the work has been repeated ab initio, and the correlation has been confirmed. It is possible to recast Bond's analysis for Norman churches in Worcestershire into a similar form (Bond 1988, 142) (Fig 3); this gives a value for  $r_s$  of 0.586 which is also significant at the 1% confidence level.

Two controls for Wiltshire churches were also investigated. Firstly a similar analysis for nine Anglo-Saxon churches (the complete set available) shows no correlation to the eye, let alone statistical analysis (Fig 4), whilst for a sample set of 11 Early English churches  $r_s$  is not significant.

These results, summarised in Table 1, show that from three independent studies in three different counties, there is a highly significant correlation whilst between Domesday population and floor area for Norman churches. This observation contrasts with the lack of correlation for churches built either before or after this period. The results confirm the view that Anglo-Saxon churches were generally not built to accommodate large numbers of worshippers, as does the significantly smaller average nave area of these churches compared to later ones. Early English churches were built over a century after the Domesday census. During this time there would generally have been significant population growth, the rate of which would have varied between parishes. One reason for

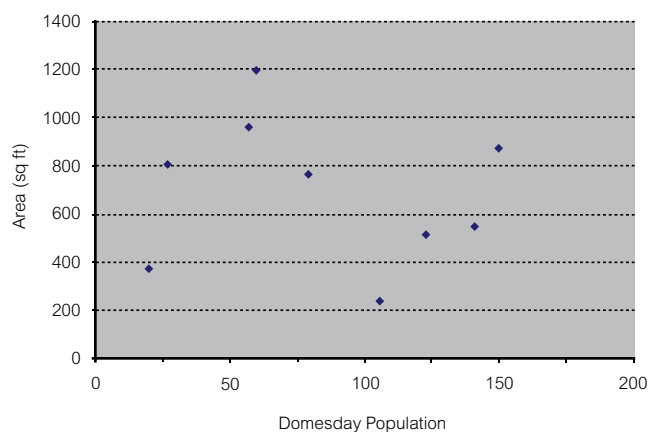


Fig 4  
Relationship of Domesday population to nave area for Anglo-Saxon churches in Wiltshire

Category	Sample Size	$r_s$	Significant at 1% Confidence level?	Average Nave Area (sq ft)
Wiltshire: Anglo Saxon Churches	9	na	no	695.5
Wiltshire: Norman Churches	53	0.607	yes	769.3
Warwickshire: Norman Churches	na	0.601	yes	na
Warwickshire: Norman Churches (Authors)	34	0.580	yes	849.7
Worcestershire: Norman Churches	29	0.586	yes	849.4
Wiltshire: Early English Churches	11	0.443	no	848.6

Table 1:  
Results of Spearman Rank Coefficient tests for groups of churches

Category	Sample Size	$r_s$	Significant at 1% Confidence Level?
Early Norman	34	0.671	yes
Late Norman	23	0.593	yes

Table 2:  
Results of Spearman Rank Coefficient tests for groups of Norman churches in Wiltshire by period

the lack of correlation between population and floor area for Early English churches might therefore be that whilst they might also have been built to accommodate the entire parish, the builders would have based their calculations on the 13th-century population and not that of four to five generations previously. It could be argued that the nave area of Anglo-Saxon churches does not correlate with Domesday populations for similar reasons, but in the case of the churches studied, all bar one are thought to have been built within two

to three generations of Domesday. However, there is a correlation for Norman churches built in the two to three generation period post-Domesday, 1150–1200 (see below).

### Period

The Wiltshire Norman set is of sufficient size to enable it to be studied in more detail. The first approach is to consider the effect of time. Table 2 shows that a significant correlation exists between Domesday population and nave area both for early Norman churches built in the period 1050–1150 and for late Norman churches (Bulford, Idmiston, West Grimstead and Winterbourne Stoke, all dated to the mid-12th century have been included in both analyses). The date ranges have been chosen primarily on the basis of change in architectural style. However, during the Anarchy Wiltshire was a border-zone between the areas controlled by Stephen to the east and Matilda to the west, so that the tax roll for 1156 describes about one quarter of the county as ‘waste’ (Watkin 1989, 46–7), and it is likely that there was a decline in building during this period as well as in populations in some localised areas. The effect of this brake on population growth could be one reason why later Norman churches still show a significant correlation between Domesday population and nave area, unlike those of the succeeding Early English period.

### Aisled and Aisleless Churches

Another approach to the data set is based on building type in order to elucidate the role of aisles. The first sub-set consists of two- or three-cell churches comprising a nave and chancel with a tower as the third element ie those churches without aisles. The 13 churches in this sample give a highly significant correlation between population and nave area (Table 3). The set includes Castle Eaton, where the north aisle was added in 1450, long after the period under study. Adding the data for Bromham, Dauntsey and Wroughton, where aisles were added between 1300 and 1400 gives 16 churches which still show a highly significant correlation at the 1% confidence level.

Turning to churches with aisles, Table 3 shows the effect for various sets, where appropriate, based on the area of aisles that were built during the Norman period (so as to discount any possible distortion due to significant population growth beyond this period). These sets are:

- total Norman churches;
- all those Norman churches with aisles built

during the Norman period;  
a division of this set into early and late Norman groupings.

This means that 18 churches from the total set of 53 have been excluded as their aisles were built after 1200, or, in some cases rebuilt, and their original floor plan is not discernable. Enford has been included in the early Norman set as the building lines for its original 12th-century aisles remain apparent after a subsequent widening.

Table 3 demonstrates that the high degree of correlation for aisleless churches is masking the situation for churches with aisles. When aisleless churches are removed, then the only highly significant

Category	Sample Size	$r_s$ significant at 1% (naves only)	$r_s$ significant at 1% (nave plus aisles)		
Aisleless	13	0.826	yes		
All Norman – all churches including those with aisles built by 1200	53	0.607	yes	0.474	yes
All Norman – only churches with aisles built by 1200	19	0.437	no	0.453	no
Early Norman – churches built 1050–1150 with aisles built up to 1200	9	0.588	no	0.938	yes
Late Norman – churches built 1150–1200 with aisles built 1150–1200	11	0.373	no	0.268	no

**Table 3:**  
*Results of Spearman Rank Coefficient tests for groups of Norman churches in Wiltshire by building type*

correlation is for the early Norman set. ***This suggests that the main reasons for building aisles were not related to population.*** A possible exception is for those early Norman churches whose naves were built prior to the introduction of aisles in the early-to-mid-12th century. When aisles were added to these churches the need to accommodate a growing congregation could have been a significant consideration; this would account for the correlation observed in the case of early Norman churches. In most cases, however, aisles formed part of the original plan when a church was (re) built, and other factors dictated their size; this issue is discussed below.

### ***Use of space***

As discussed above, the nave was not only used to accommodate the congregation, but was shared at least with a font and possibly an altar. These considerations can be explored using the analyses generated for this

study. Each graph displays a trend line of the form  $y=Ax+B$ , where A is the area per head of household and B is the area not used by the congregation. Some values for A and B are given in Table 4. They suggest that a household ‘occupied’ about 9 to 10 ft<sup>2</sup> (0.842 to 0.92 m<sup>2</sup>). There are various imponderables that advise against converting this to a figure for area per person: these include the conversion between head of household to family size discussed above, as well as uncertainty over whether the entire household attended church, and whether attendance varied between services. Nevertheless, the figure of 9ft<sup>2</sup> to 10 ft<sup>2</sup> is comparable to Morris’s suggestion of about 4 ft<sup>2</sup> per person (Morris 1989, 288).

Category	A – area in sq ft per head of household	B – area not used by congregation	Sample size
Aisleless churches	9.744	420	13
Early Norman churches with aisles – nave only	9.367	224	9

**Table 4:**  
*Figures for use of space within naves of Norman churches*

There is more variability in the area not used by the congregation. This is to be expected as this space could be compressed if numbers necessitated. Nevertheless the range looks reasonable; if Morris’s analysis is correct then a font might take 100 ft<sup>2</sup> (9.3m<sup>2</sup>) and the area around the altar 200–300 ft<sup>2</sup> (18.6m<sup>2</sup> to 27.9m<sup>2</sup>). There might, however, be other configurations such as processional routes.

These results can also be related to those from the archaeological excavations described above. The area of the nave of St Mary’s Rivenhall is 1140 ft<sup>2</sup>. Using the formula derived from aisleless churches in Wiltshire this suggests that there might have been about 70 to 80 households in the parish. There were five Domesday estates in the parish (Rodwell and Rodwell 1985, 174); Domesday figures (DB Essex) give a total of 60 heads of household in four of the five estates. The fifth estate is small and, on the basis of value, might have supported five to ten households. This gives a total of 65 to 70 households in the parish which is comparable to the estimate from the formula. The early date of the stone church suggests that parish formation had taken place relatively early, and that, even at this point, the church was designed to accommodate all the parishioners.

Another comparison is with Raunds, Northamptonshire, The area of the nave is about 370 ft<sup>2</sup>; taking 270 ft<sup>2</sup> for altar and ceremony, leaves about 100 ft<sup>2</sup> for the congregation or about 10 to 12 households. This is comparable to the estimated population from churchyard burials of 40, and with the Domesday figure of 14 households for this estate (Boddington 1996, 67; DB, 593).

The Domesday record for Wharram Percy does not give population figures; the earliest estimate of 450 is for c1300 (Bell and Beresford 1987, 10). This might equate to about 125 to 150 households. The area of the nave in the 12th-century church was 1128 ft<sup>2</sup>, a similar figure to Rivenhall and suggesting, from the formula, a Domesday population for the parish of 70 to 80 households. A doubling of population between 1100 and 1300 is compatible with the country-wide situation. Whilst the formula gives a feasible estimate of population, in this case there are too many assumptions to place over much reliance on the calculations. Another consideration in this case is the possible existence of outlying chapels: there is evidence for these in some of the outlying townships of the parish in the later medieval period. However, it is not known when they were established, and whether they were in existence in the 12th century (Bell and Beresford 1987, 6).

### Other Counties

The analysis has been applied to a number of other counties, and a dataset for Worcestershire has been constructed ab initio. The results for aisleless churches are summarised in Table 5.

These results show that the correlation between Domesday population and nave floor area is applicable

County	Diocese	No	$r_s$	$r_s$ significant at 1%	A – area (ft <sup>2</sup> ) per head of household	B – area not used by congregation
Berkshire	Salisbury	28	0.559	yes	6.94	538
Derbyshire	Lichfield	21	0.594	yes	12.99	590
Dorset	Salisbury	19	0.616	yes	7.79	390
Hereford	Hereford	36	0.509	yes	14.86	558
Hunts	Ely	10	0.746	2% only	14.95	276
Warks	Lichfield/Worcs	25	0.652	yes	7.84	563
Wilts	Salisbury	13	0.826	yes	9.74	420
Worcs	Worcs	21	0.484	yes	6.84	696

Table 5:  
*Summary of analysis of aisleless Norman churches in eight counties*

generally. They also give a range of figures for area per head of household and the area not used by the congregation, even within one diocese. This may reflect factors such as the social structure of the community, or differences in practice between the Domesday circuits (Berkshire being in the south-east circuit, Wiltshire and Dorset in the south-west, Warwickshire in the Midlands, Herefordshire and Worcestershire in the West and Derbyshire and Huntingdonshire in the Northern Circuit; Roffe 2007, 73). Huntingdonshire presents interesting anomalies with both the largest area per head of population and smallest area not used by the congregation.

### Discussion

#### Parish formation

Firstly, consideration needs to be given to the assumption that Domesday populations related to a church should be drawn from estates within the area occupied by the later parish. The outcome from the analysis suggests that at least those parishes within the data set were in existence by the late 11th/early 12th century, thereby favouring an earlier date for their formation than some scholars would recognise (eg Draper 2006). Everson and Stocker (2006) in their plan-form analysis of 51 Lincolnshire parishes of 11th-century date also assumed that they comprised the Domesday manors within the later known parish boundary.

In considering this association between church and parish in the Wiltshire data set, account should be taken of the distinction between parish, as an economic or geographical unit, and priest and church. The parish system provided for the services of a locally based priest, but at the cost of the parish having to maintain the priest and church. A parish priest could initially have operated across the established base of small proprietorial churches and minster chapels in a similar way to modern amalgamated parishes. Provision of a single church to accommodate all of the parishioners could have come later. This separation between parish formation and creation of a major stone building could explain the differences between historians' tendency to assign early dates to parish formation based on documentary evidence, and the later dates favoured by archaeologists based on the physical evidence.

#### Causal factors: wealth

Turning to the correlations from the analysis, it should be remembered that correlations do not necessarily



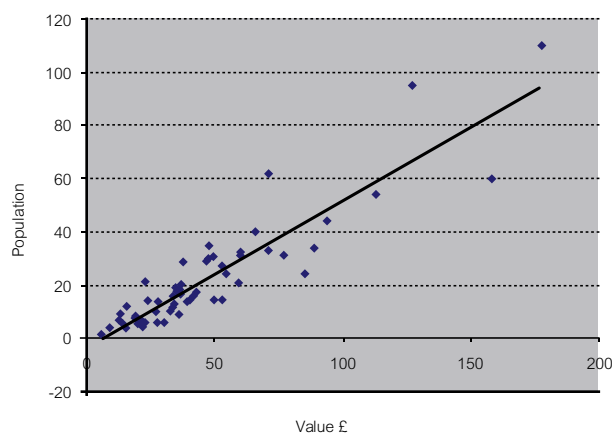


Fig 5 Relationship between Domesday population and value for the parishes of Norman churches in Wiltshire

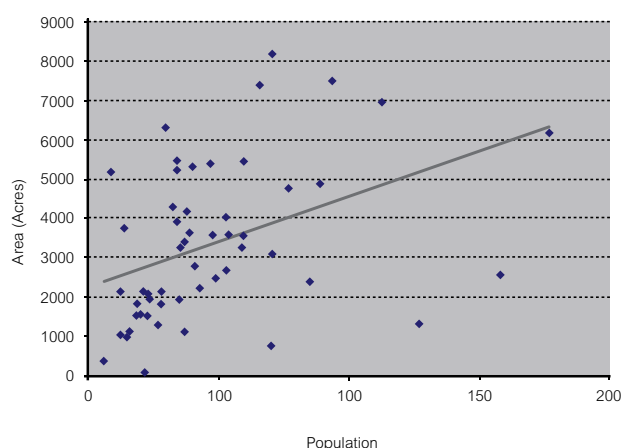


Fig 6 Relationship between Domesday population and parish area for the parishes of Norman churches in Wiltshire

imply causality. Wealth, prestige, social and liturgical requirements will be considered in turn as possible causal factors.

As Domesday Book was a taxation survey, this is a good starting point for considering wealth. Figure 5 shows that the Domesday value and population count display a high degree of correlation for the data set, with a value for  $r_s$  of 0.514, within the 1% level of confidence. There is also the same degree of correlation between Domesday population and the area of the 19th-century parish (the value for  $r_s$  is 0.405), although, as Figure 6 shows, there is more spread in the data. The high degree of correlation between population and value reflects the predominance of agriculture as the main economic activity, with income being dependent on the amount of land that could be cultivated, this in turn being dependent on the amount of manpower available. This same correlation is

observed when comparing the population to value for all Wiltshire Domesday estates and is also consistent with the statistical analyses of McDonald and Snooks (1986), in contrast to previous non-statistical approaches. The spread in Figure 6 probably reflects the degree to which land was not being worked to full capacity in 1086 – this spare capacity perhaps being taken up later to support the growth in population. The high degree of correlation between population and value means that similar patterns are seen when comparing value to floor area in Table 6.

These results show that whatever factor is creating the correlation between floor area and population for aisleless churches also applies to wealth. It also shows that wealth alone is not the dominant factor in determining floor area. In addition to relative wealth, absolute wealth is worth considering, as shown in Table 7.

Category	Sample size	$R_s$ significant at 1% (naves only)	$R_s$ significant at 1% (nave plus aisles)	
Aisleless	13	0.819	yes	
All Norman – all churches including those with aisles built up to 1200	53	0.514	yes	0.421   yes
All Norman – only churches with aisles built by 1200	19	0.326	no	0.549   no
Early Norman – churches built 1050-1150 with aisles built up to 1200	9	0.700	no	0.983   yes
Late Norman – churches built 1150-1200 with aisles built 1150-1200	11	0.380	no	0.466   no

Table 6 Results of Spearman Rank Coefficient tests for parish value and floor area for groups of Norman churches in Wiltshire by building type (compare with Figure 7)

Category	Average wealth of parish in 1086 (£)	Average area of parish (acres)	Proportion of Parishes with several Domesday estates (%)	Number of Churches that were possible former minsters	Number of parishes
Anglo-Saxon	33.42	4082	44	5	9
All Norman	22.63	3280	61	10	53
Aisleless	13.94	2360	39	1	13
Early Norman – churches built 1050-1150 with aisles built up to 1200	32.5	4393	78	2	9
Late Norman – churches built 1150-1200 with aisles built 1150-1200	22.1	3886	81	5	11
Early English	19.6	2469	18	3	11

Table 7 Average value of Domesday parishes for different groups of Wiltshire churches

Thus those parishes with surviving Anglo-Saxon churches tended to be wealthier in 1086 than those with surviving Norman churches, which are, in turn, wealthier than parishes with Early English churches. This suggests that stone church building (or rebuilding) was initiated first by those parishes best able to afford the capital outlay – the wealthiest ones. Another factor might be that these churches represent the remnants of minsters, but, as can be seen in Table 7, such churches are distributed across the data sets, so this cannot always be the case. What is noticeable, however, is that the proportion of parishes comprising several Domesday estates is higher for those parishes with Norman churches with aisles than for either parishes with Anglo-Saxon churches or aisleless Norman churches.

This data suggests that those parishes consisting of a single Domesday estate tended to make an earlier start to stone church building, perhaps indicating the decision making ability of a single estate owner. The data also suggests two strategies for Norman parish formation and church building: the lone estate approach which tended to result in smaller parishes with aisleless churches and a parish serving several estates which favoured formation of larger, wealthier parishes and churches with aisles. Reasons for the adoption of either strategy are doubtless complex: a mapping against topographical region shows no clear trend, suggesting that geographical isolation is not a predominant factor. In two cases the proximity of an aisleless to an aisled parish church (Heytesbury and Knook and Durrington and Bulford) suggests some personal factor such as differences in ownership. The nature of estate ownership does not seem to be a factor either, with both aisleless churches and the total data set having the same proportion of religious to secular owners of about 1:2. Everson and Stocker (2006, 72–3) observed a similar lack of correlation when considering the reason for the construction of Romanesque church towers in Lincolnshire. It might be argued that wealthier parishes would have also had the funds to rebuild their churches in the latest style. For the churches in the data set, the evidence is rather that churches tended to grow from the core of the original building by the addition of features such as aisles, towers and porches, rather than incur additional cost in replacing a sound structure (eg Idmiston). This is also seen at Rivenhall and Wharram Percy. On the other hand it is also worth noting that whilst there are some 72 churches in Wiltshire with a significant amount of surviving Norman architecture, there are over 110 churches which date to the later

medieval period (data from Pevsner and Cherry 1975) suggesting that rebuilding could have happened in a majority of cases. This situation may also reflect a relative decline in prosperity of Wiltshire; for example by 1334 Wiltshire had fallen from second (Darby 1977, 359) to 12th richest county in England (Watkin 1989, 53), and has a relative lack of 14th-century churches (Addison 1982, 54).

Whilst a statistical approach is useful for considering the affluence of a community, it is not valid when considering the effect of individual generosity. There is little documentation on this aspect for the Norman period, but in the later Middle Ages such donations tended to be used to support capital projects, whether, exceptionally, the complete rebuilding of a church (eg Edington), or refinements such as refenestration, or the addition of a tower or porch. These additions tended to add to the impact of the building, rather than to its size; in effect they reflect surplus wealth. Similar considerations would have applied in the Norman period: one example of an entire church is St John's, Devizes, built in lavish style by Bishop Roger of Salisbury in the early 12th century, when it served as the castle chapel. On a smaller scale another use for surplus capital could have been to employ a skilled stone carver. Sculpture, particularly around the doorways where it would also have been seen externally, was a highly visible form of display, and this could have encouraged the creation of the characteristic Norman doorways. In this respect it is notable that one of the smallest churches in the data set, Ditteridge, has one of the most striking Norman doorways in the county.

Thus whilst there may well have been individual affluent donations to church building funds in the Norman period, these would probably have been used to enhance the quality and appearance of the building, as in the later Middle Ages. Consequently the effect of any such donations does not noticeably distort the observed statistical correlation between population (or estate prosperity) and nave area.

### *Causal factors: prestige and social*

Much of the potential influence of prestige has been covered by the discussion on surplus wealth above. Another aspect of the wish to display superior status could have been enshrined in the building itself; one sign of the standing of a community could have been its ability to support a stone built church.

In turning to social factors we see that during the Middle Ages the church and manor house were usually the largest buildings in a rural settlement. The church tended to become the 'village hall' (Trevelyan 1944, 90; Fernie 2000, 231) acting as the focus for social life in the community, and becoming associated with every event in the annual calendar of parish life. The church and its precinct acted as a market place (Morris 1989, 212–3); Davies (1968) records 12th-century use of churches for dancing and plays, legal transactions, secular courts, storage of goods (particularly when threatened by attack), tax collecting and teaching. Whilst some of these social events might have required a space that could accommodate all of the community, they have left little archaeological trace. It is also not clear how consistently churches were used for this range of social functions. Given the primary religious purpose of the building, it is improbable that social considerations would have been the major factor in determining the floor area or layout of the church on the consistent basis indicated by the analysis, although Davies (1968, 78) takes a contrary view.

### *Causal factors: religious*

As discussed above, there is little documentary evidence on how space was used within churches for the Norman period. On the basis of the analysis two religious drivers are proposed. The first one is the need to accommodate the entire congregation so as to enable everyone to have the opportunity to participate in mass and, in particular, to observe the Elevation of the Host, at least for some services of particular significance. The easiest way of achieving this is with a nave: hence the high correlation between population and floor area for aisleless churches.

The second religious driver is a tendency towards more elaborate and visually spectacular services with processions and display. It is proposed that the main function of aisles was liturgical, perhaps, as suggested by the data in Table 3, after an initial period when they served to accommodate a larger congregation, and also to facilitate enhanced ceremony, perhaps including processions along the aisles. These considerations only came to the fore once the more basic needs of the first incentive had been satisfied, and during a period when the parish liturgy became increasingly elaborate. Thus aisles only start to appear from the early 12th century, at which point they are relatively narrow and better suited to pathways than accommodation. Whilst aisles will have allowed a variable degree of flexible

accommodation for people, the extra space required for this liturgical activity is the reason why, in general, there is little correlation between population and floor area for such churches. The lack of correlation within the data set also indicates that the use of ceremonial space varied considerably between churches: there is no standard formula that could be applied, unlike the reasons for the use of space in aisleless churches. This implies that there was considerable local variation in ceremonial activity, which might also be reflected in the variation in the positioning of doorways along the length of an aisle. Similarly, Graves (2000) found variations in liturgical practice between dioceses in the later medieval period.

Elaboration of the liturgy came at a price, both in terms of the capital cost of building aisles, and in recurrent costs for items such as vestments, candles and incense. These financial considerations could explain why aisles in Norman churches are associated with the wealthier parishes (Table 7).

### *Chapels*

One possible criticism of this analysis is that it ignores chapels. Chapels could have accommodated part of the population of the parish and have two principal origins in this period: chapels might be survivors from the situation preceding the formation of the parish, originating either as subsidiaries of minsters or as proprietorial chapels, as may be the case at Raunds. Chapels of ease are known from the later medieval period, when episcopal licences were required before they could be established, thereby making them more likely to be documented. The usual justification given for the creation of chapels of ease is the distance to the parish church from outlying settlements and possible dangers encountered en route. In granting a licence the bishop insisted that a chapel's community continue to respect the rights of the mother-church, paying tithes to it and attending it for the major festivals (Pounds 2000, 94). The parish church would then still have been required to accommodate all of its parishioners.

In the case of Wiltshire, careful checking of sources, in particular the VCH, has not revealed any chapels in parishes in the dataset within the Norman period. Absence of evidence is not, of course, evidence of absence. On the other hand, Wiltshire parishes were relatively small and therefore less likely to justify chapels of ease. This is particularly the case for aisleless churches, which tend to have the smallest parishes and are therefore the least likely to have justified such chapels.

Turning to chapels that might predate the formation of the parish and construction of the church, again there is little evidence in the VCH for such buildings in the parishes appearing in the dataset. One possible example is that of Crudwell: in the case of this possible Anglo-Saxon minster (Draper 2006, 61), Hankerton was a dependent chapel until becoming a separate parish in the later 12th century. The Domesday population for Crudwell is thought to include that for Hankerton. Using the nave area for both churches and Crudwell's Domesday population figure gives a very good fit with the formula observed for aisleless parish churches, suggesting that the population was indeed intended to be served by both churches. This assumes that there were no other churches in use in the area covered by the Domesday estate of Crudwell in this period (and is also an example of how such a chapel might evolve into an independent parish church), but neither of these churches are included in the dataset in order to exclude a parish with a known 11-12th-century chapel. As with chapels of ease, there may have been a requirement or tradition for all parishioners to attend the parish church for specific services, particularly if it was the mother-church for the chapel (Blair 2005, 452–6). However, it is possible that some chapels of this nature did survive into the Norman period in the larger parishes.

Worcestershire does have several chapels with both Norman fabric and a Domesday entry (Badsey, Eldersfield, Holt, Huddington, Kyre Wyard, Queenhill, Rochford, Stoulton and Wick). There is no significant correlation between their floor area and their Domesday population, suggesting that the liturgical requirement for all parishioners to attend mass applied only to parish churches. Conversely, combining the population figures for the estate of Stoulton with those for Kempsey, where the mother church is sited, gives a better fit to Kempsey's floor area, suggesting that in this case the parish church was built to accommodate all of its parishioners, whether or not they were also served by a chapel.

### *Planning and control*

The analysis suggests that there was a strong degree of control over the size of parish churches which operated across a number of counties and dioceses. Consideration can be given as to how this control might have been exercised. In the later medieval period episcopal visitations acted as a check on the proper functioning and maintenance of parish churches

(Cox 1954, 91), but it is not clear to what extent this 'top down' control operated in the 11th and 12th centuries, nor whether it would have applied to church construction. Conversely it is not obvious how a 'bottom up' control exercised at the level of individual parishes could have applied so widely in practice.

Considering firstly individual churches; responsibility for building parish churches initially lay with the lords of the manor (Fernie 2000, 230), with parishioners taking on increasing accountabilities in the period 1100–1300 (Morris 1989, 286), although the separation of responsibility for nave and chancel between laity and priest respectively was not formalised in the period. It is noticeable that for several cases in the data set the date of construction of the main fabric of a church can be associated with the period when the estate or advowson came under new ownership. Wherever funding or obligation lay, the outcome in most cases was a church built in the traditional template of local rubble and mortar (Gem 1988, 25) and reflects the planning skills of medieval church builders. The mix of secular and church ownership of manors and advowsons does not suggest any clear 'bottom up' driver for church size. Parishioners may have provided such a driver through their wish to attend services, but this is dependent on the ability of parishioners to influence the outcome, and is unlikely to have operated consistently across all regions across the period.

That the correlation applies across a number of dioceses, and that it is irrespective of the nature of the estate owner, is more likely to reflect the 'top down' desire of the church to ensure that it reached the entire population. This control could have been exerted by bishops making the size a requirement for their consecration of the church and may have developed as a reflection of the contemporary Gregorian reforms. However, whilst the consecration of a church signified the official opening of the building (Cox 1954, 71), in Wiltshire at least, this was not always carried out in a timely fashion (Templeman 1956), so this proposal needs to be treated with caution. On the other hand, bishops could have exerted an informal stimulus: for example, Everson and Stocker (2006, 92) ascribe the construction of Romanesque towers in Lincolnshire to the influence of Bishop Remigius of Lincoln.

Whilst there was a degree of control over building size, the lack of correlation between Domesday population and size of aisles also suggests considerable local variation in liturgical practices which might be due to a range of factors such as wealth and varying

spiritual needs. At the level of the internal layout of churches there was, therefore, much less control from church authorities and more freedom for the views of local patrons and parishioners.

### *Conclusions*

A statistical approach using three independent studies of three different counties has shown that there is a high degree of correlation between the Domesday population and the area of the nave of Norman parish churches; this has been confirmed by studies of another five counties. The study has shown that this correlation specifically applies to aisleless churches. Further analyses, some of them statistical, have shown that the most likely cause of these correlations is liturgical. The work has therefore supported the long standing assumption that parish churches were built to accommodate all of their parishioners.

The approach has also shown that there is little correlation between Domesday population and the area of aisles. Further considerations suggest that aisles were primarily used for liturgical purposes, possibly associated with procession and display. This is in contradiction to the work of Proudfoot (1983), but in concurrence with the views of other scholars (eg Thompson 1911, 66; Morris 1989, 289–93).

One of the assumptions of the work, that population counts should be based on all Domesday estates within the parish boundary, supports the view that parishes tended to form relatively early. This is more in line with the views of historians based on the documentary record than that of some archaeologists based on physical remains. The analysis has also yielded an estimate for the amount of space used in aisleless churches by features such as altars and fonts, and a formula for estimating population size. This has been tested against a small number of archaeological case studies.

This work also suggests scope for further study. Possible avenues include looking at further dioceses and areas, for example an area strong in single estate parishes such as the Midlands in contrast with the parishes consisting of several Domesday estates predominant in Wiltshire. The effect of large numbers of early medieval churches in an area might be explored in East Anglia and might yield further insights into the relationship between mother-churches and their dependent chapels. Further examples of aisleless

Norman churches might strengthen the robustness of the population estimation formula, and might illuminate the effect of the differing social structures of communities between counties, or perhaps of the practices of the Domesday commissioners. Within Wiltshire it would be interesting to use poll tax returns to contrast the relationships between population and nave area for 1377 and 1086.

Parish churches have survived because they have met a continuing need for spiritual support. These needs have changed with time and are reflected in changing use of churches and in their fabric. Despite these changes, this study has shown that, in favourable situations, it is possible to shed light on the factors behind church construction almost a millennia ago.

## Appendix

Table 8A:

	Grid Ref	Domesday Pop	Value	Nave Date	Area (sq ft)	South Aisle Date	Area (sq ft)	North Aisle Date	Area (sq ft)	Parish Area	Estate Owner(s) in 1086	Patron	Zone	Minster
Ashton Keynes	SU043944	41	15	1200	1237.5	r1380	588	r1350	660	2796	St Mary's, Cranborne		Vn	
Bishops Cannings	SU038642	127	95	1150-1200	1029	1150-1200	612	1150-1200	612	1309	Bishop of Salisbury	Salisbury Cathedral	Ch	M
Bradford on Avon	ST825608	158	60	1200	1102.5				1646.5	2564	Shaftesbury Abbey	Shaftesbury Abbey	Co	M
Bromham	ST963652	54	24	1100	1033.5	1300-1400	478.5		3581	3581	Crown	Battle Abbey from 1100	Vs	
Bulford	SU166437	39	13.75	1150	874				3642	3642	Amesbury Abbey	Crown	Ch	
Castle Eaton	SU146960	24	14	1170	731			1450	1964	1964	Earl Roger/Edward of Salisbury	Lord of Manor	Vn	
Chippenham	ST925732	177	110	1100-1200	1925	1100-1200	1694	1877	1694	6175	Crown	Monkton Farleigh Priory	Co	M
Chirton	SU073576	35	19	1150-1200	561	r1300-1400	264	r1300-1400	445.5	1926	Durand of Gloucester/Count of Mortain	Llanthony Priory	Ch	
Chiseldon	SU187799	89	34	1150-1200	1000	1200-1300	625	1200-1300	812.5	4884	St Peter's Westminster/Glastonbury Abbey	Winchester Cathedral	Ch	
Coleme	ST820712	34	12	1190	629	1190	450	1280	810	3921	Humphrey de L'Isle/Gilbert	Lord of Manor	Co	
Collingbourne Kingston	SU239558	66	40	1150-1200	1221	1150-1200	666	1150-1200	666	7401	St Peter's Westminster	Lord of Manor	F	
Compton Bassett	SU031716	53	14.5	1100	1062	1250	576	1175	576	2655	William de Eu/Pain/Thorkil	Bicester Priory	Ch	
Coombe Bisset	SU108263	85	24	1100	855	1175	351	1350-1450	440	2392	Crown	Salisbury Cathedral	Ch	
Dauntsey	ST979824	36	9	1100-1200	823.25	1300-1400	667.5	1300-1400	667.5	3258	Malmesbury Abbey/Elbert	Malmesbury Abbey	Vs	
Dinton	SU009316	37	20	1100	906.75				3403	3403	Shaftesbury Abbey	Shaftesbury Abbey	Vs	
Ditteridge	ST818696	6	1.5	1100	542.85				365	365	Warner	Lord of Manor	Co	
Donhead St Andrew	ST914248	60	32	1050-1150	577.5	r1826	560	1400-1500	560	3540	Shaftesbury Abbey	Shaftesbury Abbey	Vs	
Durnford	SU136383	71	33	1140	1150				3102	3102	William de Eu/Edward	Salisbury Cathedral	Ch	
Enford	SU141517	71	62	1050-1100	969	1150	535.5	1150	969	8190	Bishop of Winchester/Nigel the Physician/Earl Aubrey	Bishop of Winchester	Ch	
Figheldean	SU152475	60	31	1100-1200	546	1250-1300	420	1250-1300	420	5439	Hearding/Earl Aubrey/Amesbury Abbey	Salisbury Cathedral	Ch	
Grittleton	ST860880	23	21	1200	836	1200	773.5	1200	728	2061	Glastonbury Abbey	Glastonbury Abbey	Co	
Heytesbury	ST925425	9	4	1150-1200	999	1150-1200	610.5	1150-1200	610.5	5196	Earl Aubrey/Alward the Priest	Salisbury Cathedral	Ch	M
Hilmarton	SU020754	40	13.6	1200?	944			1200	590	5311	Roger/Robert/Ralph/Aelfric/William Delamere/Nigel	Lord of Manor	Vs	
Hullavington	ST894820	59	20.5	1100-1200	600	1150-1200	320	1150-1200	1054	3255	Ralph de Mortimer/Ralph/Edward	Abbey of St Victor	Co	
Idmiston	SU197373	34	1.3	1150	493	1150-1200	290	1150-1200	290	5482	Glastonbury Abbey/Peter/Wulfic	Bishop of Winchester	Ch	m
Kington St Michael	ST914773	49	30.5	1100-1200	721.5	1200-1250	702	r1775	741	2435	Ernulf/Gilbert/Roger of Berkeley/Roger/Glastonbury Abbey		Co	

## Appendix

Knook	ST939417	19	7	1100-1200	518.5				1175		1520	Leofgyth/Alward	Heytesbury Church	Ch
Langley Burrell	ST827758	22	4.5	1175	619.75			1175	616.17	67		Borel	Lord of Manor	Vs
Latron	SU094957	33	10	1180	641					4279		Regenbald the Priest	Cirencester Abbey	Vn
Little Langford	SU047366	13	6.5	1100-1200	577.5					1020		Wilton/Glastonbury Abbey/Letard	Lord of Manor	Ch
Luckington	ST838840	21	7	1100-1200	571.5					2185		Herman/Edward		Co
Manningford Bruce	SU139581	37	17	1100	629					1113		Winchester Abbey/Annalric/Grimbald	Lord of Manor	Ch
Marden	SU086579	27	10	1100-1200	703					1286		Hugh fitzBaldric	Bradenstoke Priory	Ch
Mildenhall	SU210695	38	28.5	1150-1200	533			1150-1200	400	4177		Edward/Humphrey de L'Isle/Gode	Lord of Manor	Ch
Norton	ST85844	15	4	1100-1200	525					990		Malmesbury Abbey	Malmesbury Abbey	Co
Oaksey	ST92936	28	6	1100-1200?	962.5					1827		Beorhtric	Monkton Farleigh Priory	Co
Ogbourne St Andrew	SU188723	47	29	1100-1200	497.8			1150-1200	416	5387		Thorkil/Miles Crispin/Alvred of Marlborough/Edward of Salisbury	Abbey of Bec	Ch
Pewsey	SU163598	77	31	1100-1200	1189.5			1200-1300	598.5	4782		St Peter's Westminster	Hyde Abbey	Ch M
Shenston	ST854860	14	5.4	1170	799			1200-1250	1170	3753		Robert	St Wandrille, Normandy	Co M
Shrewton	SU070444	43	17	1100	476			1200-1225?		2203		Edward of Salisbury/Theobald	Earl of Salisbury	Ch
Stanton Fitzwarren	SU178903	16	12	1000-1100	552.5					1103		Grimbald	Lord of Manor	Vn
Stanton St Quintin	ST905798	19	8	1125	415.56					1807		Osbern Giffard	Lord of Manor	Co
Stapleford	SU072374	28	13.5	1125	675					2118		Swein	Lord of Manor	Ch
Steeple Langford	SU036374	53	27	1100-1200	1000					4018		Humphrey de L'Isle/Waleran/Erenburgis/Count of Mortain	Lord of Manor	Ch
Stockton	ST982382	13	9.5	1160	511.5					2122		Bishop of Winchester	Bishop of Winchester	Ch
Tisbury	ST944295	94	44	1180-1200	855			1275-1325	1140	7509		Shaftesbury Abbey/Beorhtmaer	Shaftesbury Abbey	Vs M
Upton Scudamore	ST865476	49	14	1150-1200	828.75					2461		Rainbald/Ralph/Ansfrid	Lord of Manor	Ch
West Grimstead	SU212266	23	5.75	1150	378			1200	280	1509		Herbert/Cola/son of Aethelwulf	Lord of Manor	F
Whiteparish	SU246236	30	5.75	1200	833			1200	588	6316		Richard Sturm/Beorhtic/Wultric/Bernard Pauncevold/Humphrey	College of St Edmund	F m
Winterbourne Gummer	SU181353	20	5.975	1100-1200	270					1575		Saeric/Ealdrad/Godescal	Lord of Manor	Ch
Winterbourne Stoke	SU077406	48	34.5	1150	846					3572		Crown	Jumieges Abbey	Ch m
Winterslow	SU229325	34	16	1100	540			1200	516	5236		Earl Aubrey/Count of Mortain/Wulfward	Amesbury Priory	F
Wroughton	SU137803	113	54	1100-1200	1225.58			1300-1400	631.2	6950		Ealdrad/Robert/Earl Aubrey/Harold	St Swithuns Priory	Ch

*Summary of Norman churches in the datasets. Information on Domesday populations, values and estate owners is taken from Williams and Martin 1992. Parish areas are based on 19th-century parishes and either taken from the relevant entry in VCH or from Kelly 1899; in practice Kelly was the source of most of the VCH figures as well. 'Zone' indicates the topology: Ch=chalk-land, Co=Cotswold, F=forest, Vn=clay vale north (later Royal forest), Vs=vale south. 'Minster' indicates whether the church was originally a minster (M=certain/likely, m=possible) and is taken from Draper (2006 61).*

## Appendix

	Grid Ref	Domesday Pop	Value	Nave Date	Area (sq ft)	S Aisle Date	Area (sq ft)	N Aisle Date	Area (sq ft)	Parish Area	Patron	Minster
<b>Anglo-Saxon</b>												
	SU263758	150	60	1000-1100	875	1000	594	1175	680	8502	Nogent le Retroce	m
	SU107620	20	9	1000	371					1040	Lord of Manor	
	SU163284	60	33.625	900	1197					3104	Salisbury Cathedral	m
	ST980730	79	16	1000	765	r1400-1500	495	r1400-1500	450	5874		
	SU073312	27	14	1000?	807.5			1859	267.75	1851		
	ST874706	141	31	1000?	542.5	1350-1400	810	1300	1311	6589	St Stephen's, Caen	
	ST957929	123	43.15	1000-1100	510	1300-1400	660	1225	935	4899	Malmesbury Abbey	m
	ST880305	57	30	1000?	963.5	1845	442	1800-1840	490	5786	Lord of Manor	
	ST995585	106	72	1000	239.25					3183	Salisbury Cathedral Chapter	m
<b>Early English</b>												
	ST950396	17	11.5	1200-1250						3939	Lord of the manor	
	ST878632	23	12	1200-1250	623			1200-1250	467	1616	Shaftesbury Abbey	
	SU319705	19	10	1200-1250	1150.5					2177		
	SU123260	2	1.5	1250	608	1500	365	1350	418	1265	Salisbury Cathedral Chapter	
	SU067438	25	9	1250	799	1400	352.5			3968	Amesbury Priory	
	SU147484	127	61.5	1200-1300	952	1450	780	1450	780	5160	Salisbury Cathedral	M
	ST833648	30	6	1200-1300	834			1200-1300?	754.3	2174	Lord of the manor	
	SU060449	30	13	Medieval	646					2198	Lord of the manor	
	ST995585	106	72	1200-1250	1144					3183		m
	SU096872	50	16	1200-1250	817	1200-1250	781	1200-1250	490	1478	Malmesbury Abbey	m
	SU074431	8	3	1200-1250	495					870	St John of Jerusalem	
<b>Other Churches</b>												
	ST974908			1100-1200	840			1200-1300	591.5	2203	Rector of Crudwell	

Table 8B:  
Other churches used in the analysis (ie not Norman)



*Appendix*

Parish churches with Norman nave not included in analysis			
		Grid Ref	Reason for Exclusion
Baydon	St Nicholas	SU282781	NDB
Berwick St James	St James	SU072392	Low Population
Berwick St Leonard	St Leonard	ST924332	NDB
Biddestone	St Nicholas	ST863736	Low Population
Cricklade	St Mary	SU101939	NDB
Devizes	St John	SU005612	NDB
Donhead St Mary	St Mary	ST907244	NDB
Downton	St Lawrence	SU181216	Domesday figures combined with Bishopstone
Durrington	All Saints	SU157449	Low Population
East Coulston	St Andrew	ST952539	Low Population
Froxfield	All Saints	SU296680	NDB
Fugglestone	St Peter	SU102314	NDB
Hankerton	Holy Cross	ST972908	NDB
Little Bedwyn	St Michael	SU278643	Domesday figures combined with Great Bedwyn
Little Hinton	St Swithin	SU233834	Low Population
Ludgershall	St James	SU263509	Late build, associated with development of new town, so church size probably relates to this development
Nunton	St Andrew	SU159261	NDB
Rodbourne	Holy Rood	ST934834	Chapel until about 1200
West Harnham	St George	SU135293	NDB
West Lavington	All Saints	SU006530	NDB

*Table 8C:*

*Churches with Norman naves excluded from the analysis and the reasons for doing so. Low population indicates less than 6 heads of household recorded in Domesday. NDB indicates no entry in Domesday*

*Kathryn Wand is a Lecturer at the Department of Management and Security, Cranfield University; John Wand is an amateur archaeologist and Deputy Director for Research at the Economic and Social Research Council.*

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