Proof of Evidence of

Peter Mitchell FICCM(Dip)

The need for a new crematorium

Land at Natural Burial Site, Turners Hill Road, Turners Hill, RH10 4PB

Hartmires Investments Ltd

PINS Ref: APP/3266563

April 2021

1 Executive Summary

- 1.1 This proof of evidence demonstrates that there is a compelling quantitative and qualitative need for a new crematorium, located at Turners Hill in Mid Sussex District. Primarily, this need arises from the pressing requirement to provide additional capacity for the catchment of the significantly over-trading Surrey and Sussex Crematorium at Crawley.
- 1.2 In 2019, the twin chapel Surrey and Sussex Crematorium undertook a total of 2,930 cremations and it was the 11th busiest crematorium out of 307 in the whole of the UK. This reflects the Surrey and Sussex Crematorium's broad ranking in the list of busiest UK facilities over a number of years.
- 1.3 It is also the most expensive crematorium in the UK, jointly with nine other crematoria operated by its owner Dignity Funerals Limited (Dignity). The charge at the Surrey and Sussex Crematorium is one third more than the average charge at UK crematoria.
- 1.4 Its UK ranking, both in terms of high numbers of funerals and high price, indicates that there is a lack of competition within its large catchment area, resulting in a lack of choice for bereaved people, who must wait longer than acceptable to book a slot (associated average periods between death and cremation being over 3 weeks virtually year-round and closer to 4 weeks in the peak winter period) and then pay significantly more than average to use a crematorium that is one of the busiest in the UK.
- 1.5 The Downs Crematorium (Dignity) and Woodvale Crematorium (Brighton and Hove District Council) each have two chapels and are located on adjacent sites in Brighton. In contrast to the Surrey and Sussex Crematorium's fee of £1,070, both Brighton crematoria charged only £633 in 2019.

- 1.6 The two Brighton crematoria have a combined catchment population of 445,744 (data from Beacon Dodsworth (BD)) and in 2019 together undertook 2,747 cremation funerals, excluding direct cremations. This was an average of 687 cremation funerals per chapel that year.
- 1.7 In contrast, the Surrey and Sussex Crematorium has a catchment population of 401,860 (data from BD) and in 2019 undertook 2,841 cremation funerals, excluding direct cremations. This was an average of 1,420 cremation funerals per chapel that year.
- 1.8 In the first Essington Planning Appeal decision¹ [CD 12.4], the Inspector stated that a crematorium operating above 80% of its practical capacity makes it difficult to offer a cremation service that meets an acceptable quantitative standard. The Secretary of State's first decision letter endorsed this approach. The Essington appeals found substantial need for new capacity as a consequence of over-trading at Bushbury Crematorium (a less busy facility than Surrey and Sussex), ultimately justifying consent for 2 new crematoria, both located in the Green Belt.
- 1.9 In addition, the first Essington Inspector stated, "need is not simply demonstrated by a blackletter calculation ... qualitative issues are a manifestation of quantitative deficiencies...Given that slot times are 45 minutes it is likely that there will often be four funeral parties on site at any given time. This results in a conveyor-belt experience for mourners. This is clearly deficient given the sensitivities which surround the grieving process."²
- 1.10 The Surrey and Sussex Crematorium operates well above 80% of its practical capacity in the peak month of demand. The sheer volume of funerals and the 45 minute slot times combine to make it a very busy crematorium site, which in the words of the Inspector is likely to lead to "*a conveyor-belt experience for mourners*".

¹ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire para 215 ² Ibid para 216

- 1.11 In my judgment, preferred core times for funerals to commence lie between 10.30am and 3.30pm. The Westerleigh Group, crematoria developers and operators, take a similar view and consider the times to lie between 10.30am and 3.00pm. Analysis of usage patterns for both busy and not so busy crematoria strongly support these periods as bereaved peoples' preferred core slots, with other periods generally only significantly used where such core slots are already taken up and the alternative choice is a longer wait.
- 1.12 The effect of increasing the number of core slots, by widening the definition of core hours, is to reduce the apparent trading level of crematoria. In objecting to the proposed Turners Hill Crematorium, Dignity have provided an alternative classification of core funeral times. These measures purport to provide an additional 504 core time funeral slots per year. Dignity's approach is not consistent with what it has said publicly elsewhere, nor does it sit comfortably with the analysis I explain below (or my / Westerleigh's experience). More striking is that Dignity's objection to the appeal proposal ignores its clearly stated position elsewhere that one hour funeral service interval times are essential to safeguard the interests of bereaved people. By contrast, Surrey and Sussex Crematorium's two chapels both continue to operate with 45 minute intervals plainly an essential part of Dignity's business model for this facility.
- 1.13 The evidence from Freedom of Information requests and obituaries suggests that there is some unevenness of use of the chapels at the Surrey and Sussex, The Downs and Kent and Sussex.
- 1.14 The table below summaries the average levels of practical (core) capacity working at four crematoria included within this proof of evidence. The table shows both even and uneven use of chapels, where applicable.

1.15 For the Surrey and Sussex Crematorium, the first column is based upon my original understanding of service time availability and my view on times of core services. The second column reflects Dignity's alleged alternative classification.

	Averages for 2016 to 2019 inclusive						
Level of practical (core) capacity in peak month	Surrey & Sussex			_	Kent &		
	РМА	Dignity	Woodvale	Downs	Sussex		
Even use of each crematorium's chapels	108%	95%	85%	56%	82%		
Uneven use of each crematorium's chapels	130%	114%	85%	74%	132%		

Figure 1: Summary of average levels of practical (core) capacity in peak months of demand

- 1.16 Whilst the capacity levels at the three more distant crematoria are noteworthy, the crematorium closest to the appeal site, Surrey and Sussex Crematorium, is working significantly above 80% of its practical capacity during peak months. Even using Dignity's own classification of service times and assuming an even use of both chapels, the Surrey and Sussex is operating at 95% of its Practical (core) capacity during the peak month of demand.
- 1.17 Based upon ONS projected increases in catchment deaths by 2043, increased levels of overcapacity working at the Surrey and Sussex and other crematoria in the region are the only logical outcome, without the development of additional crematorium capacity to meet the needs of the catchment population.
- 1.18 Drive-time catchment analysis by two different companies (Vectos Limited (Vectos) for the Appellant) and BD for the Council)), each employing different software and geographical units, is summarised in the table below. Coupled with the clear evidence of overtrading at the Surrey and Sussex Crematorium, these catchment populations demonstrate the significant quantitative need for Turners Hill Crematorium.

	Popul	ation			
Vectos	Beacon Dodsworth	Average	Difference	Description	
11,755	40,489	26,122	28,734	People living within 15 minutes' drive-time	
10,008	29,753	19,881	19,745	People living within 15 minutes' drive-time of a crematorium for the first time	
88,305	114,978	101,642	26,673	People living within 30 minutes' drive-time	
43,532	38,847	41,190	(4,685)	People living within 30 minutes' drive-time of a crematorium for the first time	
122,916	122,234	122,575	(682)	People living within 45 minutes' drive-time	

Figure 2: Drive-time catchment populations

- 1.19 The proposed new Turners Hill Crematorium would create new additional capacity for up to six core funeral service times per weekday, if commencing at 10.30am. This would equate to an additional 1,512 core slots per year.
- 1.20 The new Turners Hill Crematorium would offer additional choice for people to arrange a funeral on their preferred date and time for either natural burial or cremation, in closer proximity to where they live and at a lower cost.
- 1.21 In contrast to the 45 minute service interval at the very busy twin chapel Surrey and Sussex Crematorium, the 60 minute service interval likely to be offered in the single chapel at Turners Hill Crematorium, where there will be far fewer funerals taking place each day, will result in much greater privacy and space for each funeral party. This will enable the all-important avoidance of the 'conveyor belt' experience so common at existing over-capacity crematoria, such as the Surrey and Sussex Crematorium.
- 1.22 The drive-time catchment analysis indicates that in 2018, 1,205 deaths occurred within Turners Hill Crematorium's catchment area. Applying a national cremation rate of 80% suggests that 964 of these deaths would result in cremation. It is widely acknowledged that funeral journey time is not the sole factor influencing people's choice of crematorium.

- 1.23 The catchment analysis also suggests that, with Turners Hill in operation, Surrey and Sussex Crematorium would undertake 890 less cremations per year. The beneficial impact of this would be to reduce the level of practical capacity at Surrey and Sussex Crematorium to below the 80% quantitative standard.
- 1.24 It is neither feasible nor desirable to increase capacity at the Surrey and Sussex Crematorium by building a third chapel. The layout of the buildings, roads and car parks, combined with constraints such as extensive surrounding Ancient Woodland and the burial of ashes in family memorial plots in close proximity to the buildings, mean that it would not be possible to integrate a new third chapel and its associated car parking. (See constraints map as separate Appendix 1 [CD 7.3b]). In any case, the increase in vehicles and people attending funerals in three chapels would further compromise the qualitative offer at the crematorium.
- 1.25 It is unsurprising that Dignity should object to the proposed Turners Hill Crematorium, as it would divert cremations away from the Surrey and Sussex Crematorium. However, in the Bluebell Cemetery Appeal decision [CD 12.6], the Inspector Rachael Pipkin stated:
- 1.26 35. There is an extant planning permission for a crematorium at another site, Oak Tree Farm, just over a mile south of the appeal site. The need for a second crematorium has been raised by a number of interested parties. However, it is not the role of the planning system to restrict competition between different commercial interests.³
- 1.27 Evidence from the Office for National Statistics (ONS) indicates a significant and sustained growth in the population and numbers of deaths within the local authority areas served by existing crematoria. In view of the current levels of over-capacity working, there is a clear and compelling quantitative need for addition crematoria

³ Appeal Ref: APP/G2245/W/19/3243177 Bluebell Cemetery, Watercroft Woods, Old London Road, Badgers Mount TN14 7AE

provision. The location of the proposed Turners Hill Crematorium will enable it to meet both the current and future needs of a significant and growing population.

- 1.28 A sample of 200 obituaries reveals an average delay between death and funeral of over three weeks at existing crematoria serving the area, with an average of 44% of funerals delayed even longer. A sample of 194 obituaries relating to funerals at the Surrey and Sussex Crematorium indicates an average delay between death and funeral of over three weeks. Without additional crematoria provision, the projected increases in numbers of deaths in the area will inevitably lead to extended delays. Numerous Appeal decisions have described delays of 2 weeks (let alone 3 weeks) as unacceptable.
- 1.29 The proposed new Turners Hill Crematorium will:
 - Reduce delays between death and funeral through offering new additional capacity.
 - Reduce the funeral journey time for many thousands of people.
 - Improve mourners' experience through the design and quality of its facilities.
 - Provide greater choice for local people wishing to arrange a cremation.
- 1.30 In spite of their increased workload during the coronavirus pandemic, four out of twenty independent family Funeral Directors invited managed to complete a questionnaire, with the questions and responses shown in Appendix 4 to this report.
- 1.31 100% of those responding consider that a new crematorium at Turners Hill would provide greater choice and availability of service times to bereaved people and Funeral Directors than is currently available.
- 1.32 75% of those responding consider that:

- A new crematorium at Turners Hill would reduce funeral journey times for people in the area.
- 60-minute service intervals at a new crematorium at Turners Hill would be a benefit to mourners.
- There are not enough crematoria in the area to meet foreseeable future need.
- 1.33 50% of those responding consider that:
 - There are not enough crematoria in the area to meet current need.
 - When making a booking the preferred day and time is not usually readily available.
 - Existing crematoria do not have sufficient core time capacity.
 - A new crematorium is needed at Turners Hill to better serve the needs of people in the area.
 - A new crematorium at Turners Hill would be well located to meet the needs of Funeral Directors serving the people in the area.

2. Table of Contents

1	Exec	cutive Summary	2
2	. Tab	e of Contents	10
4	. Intro	oduction	14
5		author	
6		national context of demand for cremation	
7		local context of demand for cremation	
	7.1	Current deaths	
	7.4	Projected population	
	7.12	Projected deaths	
	7.18	Summary of projected population and deaths	
8	. Qua	ntitative need for Turners Hill Crematorium: drive-time catchment analysis	38
	8.2	Funeral drive-times	
	8.32	Drive-time catchment threshold populations and cremations	
	8.47	Funeral drive-time catchment mapping	
	8.56	Existing provision – scenario 1	
	8.60	Proposed provision - scenario 2	56
	8.71	Alternative drive-time catchment analysis	63
	8.83	Joint catchments	66
9	. Qua	ntitative need for Turners Hill Crematorium: factors affecting capacity	68
	9.1	Technical capacity – number of cremators	68
	9.6	Technical capacity – funeral service slots	69
	9.20	Core or Practical Capacity	73
	9.47	Funeral service interval and funeral service duration	81
	9.63	Seasonal fluctuations in demand	87
	9.78	Monthly fluctuations in deaths	92
	9.79	Direct cremation	94
1	0. Qua	ntitative need for Turners Hill Crematorium: assessing current capacity	95
	10.3	Capacity at Surrey and Sussex Crematorium	96
	10.18	B Dignity's alternative capacity figures	103
	10.32	2 Impact of Turners Hill Crematorium upon Surrey and Sussex	108
	10.47	Capacity at Woodvale Crematorium, Brighton	_ 113
	10.54	Capacity at The Downs Crematorium	_ 116
	10.61	Capacity at the Kent and Sussex Crematorium	_ 119

10.68	Summary of capacity at existing crematoria	123
10.73	Capacity at Wealden Crematorium	125
10.80	Capacity at Turners Hill Crematorium	128
11. Quali	itative need for Turners Hill Crematorium	130
11.2	Availability of preferred slots	130
11.19	Journey times to crematoria	138
11.25	Congestion at crematoria: the 'conveyor belt' experience	139
11.50	Meeting the needs of the present and future generations	144
Appendix	1: Site constraints at the Surrey and Sussex Crematorium	155
Appendix	2: ONS 2018-based SNPP Population Variants	156
Appendix	3: Surrey and Sussex Crematorium Price List	158
Appendix	4: Survey of Funeral Directors	159

3. List of Figures

Figure 1: Summary of average levels of practical (core) capacity in peak months of demand	
Figure 2: Drive-time catchment populations	
Figure 3: Annual numbers of deaths, burials and cremations in the UK between 1885 and 2019	
Figure 4: Annual percentages of burials and cremations in the UK between 1885 and 2019	
Figure 5: UK Crematoria Development and Cremations 1885 to 2019	
Figure 6: ONS UK Deaths: 1885-2019 Actuals and 2018-2117 Projected	
Figure 7: ONS 2018-based projected deaths by decade 2020 to 2117	
Figure 8: ONS 2018-based UK projected births, deaths and net migration	
Figure 9: Age structure of the UK mid 2018 and mid 2043	
Figure 10: Projected UK population by life stage mid 2018 tom mid 2043	
Figure 11: ONS projected annual mortality improvement rates	
Figure 12: Long-term assumptions for the 2018-based national population projections, UK	
Figure 13: Estimated and projected total population for selected variants mid 1994 to mid 2043	
Figure 14: ONS variant projections for deaths in England	
Figure 15: Deaths by quinary age band in 2019	
Figure 16: Proportions of deaths in 2019 by three broad age bands	
Figure 17: ONS 2018-based projected population change 2020 to 2043	
Figure 18: Summary of ONS 2018-based variant projected population change 2020 to 2043	. 32
Figure 19: Summary of ONS 2018-based variant projected population change 2020 to 2043	. 33
Figure 20: Summary of ONS 2018-based variant projected population change 2020 to 2043	. 33
Figure 21: ONS 2018-based projected change in deaths 2020 to 2043	. 34
Figure 22: Summary of ONS 2018-based variant projected change in numbers of deaths 2020 to 2043	. 34
Figure 23: ONS 2018-based variant projected numbers of deaths (65 and over) 2020 to 2043	. 35
Figure 24: ONS 2018-based variant projected numbers of deaths (85 and over) 2020 to 2043	. 35
Figure 25: Why respondents chose a crematorium that was not their closest	. 43
Figure 26: Opening Alford and Surfleet Crematoria	. 45
Figure 27: Opening Gravesend Crematorium	. 45
Figure 28: 15 -minute drive-time catchments of existing crematoria	. 53
Figure 29: 30 -minute drive-time catchments of existing crematoria	
Figure 30: 45 -minute drive-time catchments of existing crematoria	. 55
Figure 31: 15-minute drive-time catchments of existing crematoria, plus proposed Turners Hill Crematorium .	. 57
Figure 32: 30 -minute drive-time catchments of existing crematoria, plus proposed Turners Hill Crematorium .	. 58
Figure 33: 45-minute drive-time catchments of existing crematoria, plus proposed Turners Hill Crematorium .	
Figure 34: Population and deaths within drive-time catchments of existing crematoria provision	. 60
Figure 35: Population and deaths within drive-time catchments of proposed crematoria provision	
Figure 36: Change in population and deaths between existing and proposed crematoria provision	
Figure 37: Local authority populations served by proposed Turners Hill Crematorium	
Figure 38: Local authority populations served by proposed Turners Hill Crematorium	
Figure 39: Population and deaths within drive-time catchments of existing crematoria provision	
Figure 40: Population and deaths within drive-time catchments of proposed crematoria provision	
Figure 41: Variation in population and deaths between existing and proposed crematoria provision	
Figure 42: Comparison of drive-time catchment populations	
Figure 43: Existing drive-time catchment populations	
Figure 44: Proposed drive-time catchment populations	
Figure 45: Funeral times used at Fenland Crematorium 2014 to 2016	
Figure 46 : Funeral service times booked at Fenland Crematorium 2014 to 2016	
Figure 47: Funeral services times booked at the Chilterns Crematorium January to March 2018	
Figure 48: Funeral service times booked at Honor Oak Crematorium in 2019	
Figure 49: Changes in crematoria funeral service interval times 2012 to 2019	
Figure 50: Technical (Total) and Practical (Core) Capacity at a single chapel crematorium	
Figure 51: Technical (Total) and Practical (Core) Capacity at twin chapel crematoria	
Figure 52: Average monthly deaths in England and Wales 2015 to 2019	
Figure 53: ONS Monthly deaths by usual residence of the deceased for 2019 & 2017	
Figure 54: ONS Monthly deaths by usual residence of the deceased for 2010 & 2017 Figure 54: ONS Monthly deaths by usual residence of the deceased for 2018 & 2019	
righte 37. Ond monthly deaths by asaultesidence of the deceased jor 2010 & 2019	

Figure 55: Proportions of annual deaths occurring in peak months 2016 to 2019	
Figure 56: Direct cremations in 2019	
Figure 57: Derivation of data used in capacity tables	
Figure 58: UK ranking by cremation volumes of Surrey and Sussex Crematorium 2016 to 2019	
Figure 59: UK ranking by cremation charge of Surrey and Sussex Crematorium 2016 to 2019	
Figure 60: Comparison of cremation volumes	
Figure 61: Comparison of crematorium charges	
Figure 62: Comparison of cremation numbers at Surrey & Sussex and Bushbury	
Figure 63: Funeral service times at the Surrey and Sussex Crematorium	
Figure 64: Capacity levels at Surrey & Sussex Crematorium 2016 to 2019	
Figure 65: Peak month capacity if one chapel hosts 60% of funerals	
Figure 66: ONS 2018-based population projections for deaths	
Figure 67: Projected capacity levels in 2043	
Figure 68: Comparison of funeral service times at the Surrey and Sussex Crematorium	
Figure 69: Alternative capacity levels at Surrey & Sussex Crematorium 2016 to 2019	
Figure 70: Comparison of projected capacity levels in 2043	
Figure 71: Impact of Turners Hill upon Surrey & Sussex Crematorium (original PMA slot times)	
Figure 72: Impact of Turners Hill upon Surrey & Sussex Crematorium (original Final Solit times)	
Figure 72: Impact of formin upon survey & sussex Crematonium (internative siot times) Figure 73: Potential impact of 60 minute service intervals and lower cremation numbers	
Figure 74: Funeral service times at the Woodvale Crematorium	
Figure 75: Capacity levels at Woodvale Crematorium 2016 to 2019	113 111
Figure 76: ONS 2018-based population projections for deaths	
Figure 77: Projected capacity levels in 2043	
Figure 78: Funeral service times available at The Downs Crematorium	
Figure 79: Capacity levels at the Downs Crematorium 2016 to 2019	
Figure 80: Peak month capacity if the Main Chapel hosts 60% of funerals	
Figure 81: Projected capacity levels in 2043	
Figure 82 : Funeral service times available at the Kent and Sussex Crematorium	
Figure 83: Capacity levels at Kent & Sussex Crematorium 2016 to 2019	
Figure 84: Peak month capacity of the main crematorium chapel holds 81% of cremation funerals	
Figure 85: ONS 2018-based projections for deaths	
Figure 86: Projected capacity levels in 2043	
Figure 87: Average capacity levels 2016 to 2019, assuming an equal share of funerals per chapel	
Figure 88: Average capacity levels 2016 to 2019, reflecting unequal share of funerals per chapel	
Figure 89: Funeral service times available at Wealden Crematorium	
Figure 90: Hypothetical capacity levels at Wealden Crematorium in 2019	
Figure 91: Funeral service times available at Turners Hill Crematorium	
Figure 92: Hypothetical capacity levels in 2019	
Figure 93: Days between death and funeral	
Figure 94: 200 Obituaries sorted by period between death and funeral	
Figure 95: Delays between death and funeral at the Surrey and Sussex Crematorium	
Figure 96: Average days from death to funeral at the Surrey and Sussex Crematorium	
Figure 97: Obituaries relating to funerals at the Surrey & Sussex Crematorium	
Figure 98: ONS 2018-based SNPP variant projections for population of all ages	
Figure 99: ONS 2018-based SNPP variant projections for deaths all ages	157

4. Introduction

- 4.1 This report examines the quantitative and qualitative need for a new crematorium located at Turners Hill Road, Turners Hill RH10 4PB in Mid Sussex District.
- 4.2 Quantitative need focuses upon the population and numbers of deaths within crematoria catchment areas and the capacity of existing crematoria to accommodate current and future demand for cremation.
- 4.3 Qualitative need focuses upon the current and future capacity of existing crematoria in the area to meet demand for funerals at preferred (core) times; the length of time between death and being able to arrange a cremation at a convenient time; the journey time to the crematorium and the experience of bereaved people once they are at the crematorium.
- 4.4 Quantitative and qualitative need have a degree of mutual relationship. For example, offering 30 minute service interval slots, as opposed to 45 minutes or 60 minutes, will provide more capacity to meet quantitative need. However, it will inevitably create a much poorer qualitative experience for bereaved people and other stakeholders.
- 4.5 This report includes an initial summary of the national context of demand for cremation in the UK, before examining the need for a new crematorium at Turners Hill.
- 4.6 This report utilises data from various sources, including:
 - Data released by the Office for National Statistics (ONS) on population and deaths by Lower Super Output Area (LSOA) in 2018.
 - [CD 11.11 and CD 11.12] ONS 2018-based subnational population projections and their variants.

- [CD 11.1A to CD 11.1H inclusive] Annual cremation statistics and annual crematorium fees from the Cremation Society of Great Britain (available via their website www.cremation.org.uk).
- [CD 11.14 and CD 11.15] Information gained through Freedom of Information requests.
- Responses to a survey questionnaire of Funeral Directors.

5. The author

- 5.1 I am Peter Mitchell and I have worked in the Bereavement Services sector for more than 37 years, initially working at all levels from operations to management in both public and private sector cemeteries and crematoria. I managed two public sector and two private sector crematoria in different parts of the UK between 1986 and 2002. These sites included the Surrey and Sussex Crematorium at Crawley.
- 5.2 In addition to my full-time employment, I was also both the Law Tutor (9 years) and Technical Officer (5 years) for the Institute of Burial and Cremation Administration (IBCA), now the Institute of Cemetery and Crematorium Management (ICCM), for which I also served as a Director. In 1987 I gained the Institute's Diploma and I was elected a Fellow of the ICCM in 2001.
- 5.3 Since April 2002, I have been an independent consultant, trading as Peter Mitchell Associates (PMA), specialising in all matters relating to burial, cremation and exhumation.
- 5.4 Within an extensive range of consultancy projects, I have completed feasibility studies into new crematoria, cemeteries and green burial sites and also strategic and operational reviews of existing facilities. I have also completed Need Assessment reports in support of planning applications and planning appeals for both new crematoria and cemeteries and I have appeared as an expert witness at Planning Inquiries. My clients include local authorities and crematoria development companies.
- 5.5 I am an expert in this sector and have built my reputation upon not only my expertise, but also my complete independence, which are both reflected in this proof of evidence.

5.6 **EXPERTS DECLARATION**

- 5.7 I confirm that my duty to the Planning Inquiry as an expert witness overrides any duty to those instructing or paying me, that I have understood this duty and complied with it in giving my evidence impartially and objectively, and that I will continue to comply with that duty.
- 5.8 I confirm that my Proof of Evidence includes all facts which I regard as being relevant to the opinions which I have expressed and that attention has been drawn to any matter which would affect the validity of those opinions.
- 5.9 My Proof of Evidence includes or reflects all relevant facts of which I am aware. Where I have made specific or important assumptions these are set out or included as an appendix. If there are material matters of which I am unaware or if the assumptions are incorrect or inappropriate for any reason of which I am currently unaware it could have a material effect upon my stated opinion.
- 5.10 I confirm that I am not instructed under any conditional fee arrangement nor have I entered into any agreement by way of funding this Appeal either directly or indirectly.

5.11 Conflicts of interest:

- 5.12 I am not aware of any conflicts of interest of any kind other than those already disclosed in my report.
- 5.13 I do not consider that any of the matters set out affect my suitability to act as an expert in this matter.
- 5.14 I undertake to advise those instructing me if, between the date of this Proof of Evidence and the Planning Inquiry, there is any change in circumstances which will impact on this declaration.

6 The national context of demand for cremation

- 6.1 The first public crematorium in the UK opened at Woking in 1885 and carried out only 3 cremations that year. The second crematorium opened in 1892 in Manchester. For many years, cremations continued to represent a very small proportion of funerals in the UK. However, as more crematoria were built in different locations, cremation became more readily available as an option and was selected by an increasing number of bereaved people.
- 6.2 In **2018**, cremation accounted for **81.3%** of all funerals in England, with an overall UK rate of 78.4%. There can be local variation from these national average figures.
- 6.3 The number of deaths, the development of crematoria and the number of cremations undertaken each year should be viewed within the context of demographic and other factors. These include improvements in healthcare, diet, lifestyle and disposable income that have contributed to significant decreases in death rates during the 20th century.
- 6.4 The charts below illustrate deaths in the UK since 1885, combined with the changing patterns of demand for burial and cremation. The sources of data for these charts are the Office for National Statistics (ONS) and the Cremation Society of Great Britain.
- 6.5 All three charts use data from across 134 years and reveal distinct trends.

6.6 The chart below illustrates the annual numbers of deaths, burials and cremations in the UK between 1885 and 2019.

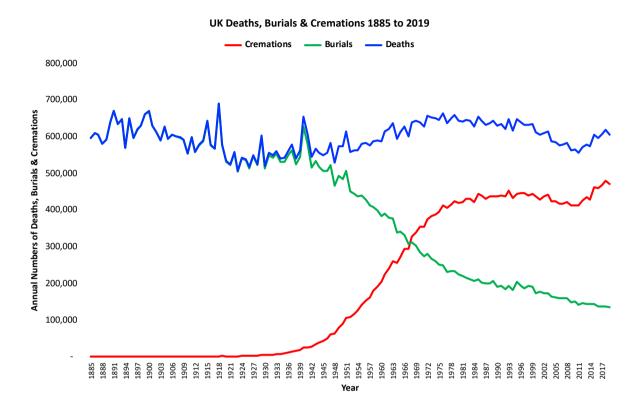


Figure 3: Annual numbers of deaths, burials and cremations in the UK between 1885 and 2019

6.7 This chart illustrates:

- The dramatic increase in the number of cremations since 1940.
- The corresponding significant decline in the number of burials.
- The noticeable decline in the number of deaths from a peak in the 1980s.
- The increase in the number of deaths and cremations beginning in 2012.

6.8 The chart below illustrates the proportions of deaths in the UK between 1885 and2019 resulting in burial and cremation.

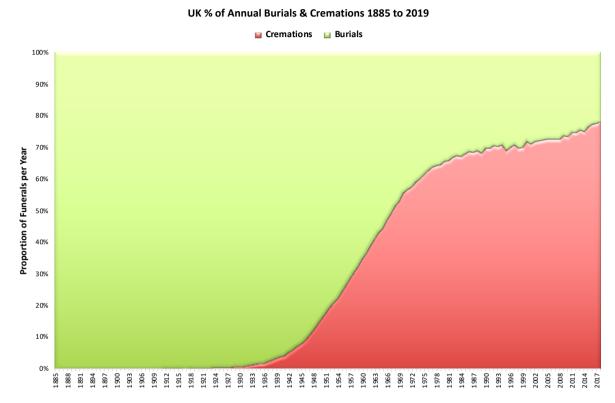


Figure 4: Annual percentages of burials and cremations in the UK between 1885 and 2019

6.9 This chart illustrates:

- The dramatic increase in the proportion of deaths resulting in cremation between 1940 and 1970.
- The sustained increase in the proportion of deaths resulting in cremation since 1970, despite falling numbers of deaths illustrated above in Figure 1.

6.10 The chart below juxtaposes the development of crematoria and the number of cremations in each year between 1885 and 2019.

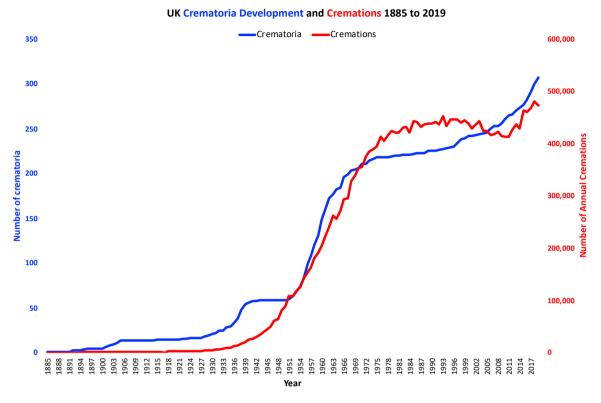


Figure 5: UK Crematoria Development and Cremations 1885 to 2019

6.11 This chart 4 illustrates:

- The close link between the availability of crematoria and the number of cremations.
- The pre-war surge in crematoria construction, with 35 crematoria built during the 1930s.
- The post-war boom in crematoria construction, with 73 crematoria built in both the 1950s and 1960s.
- The further surge in crematoria construction since 2000. In the decade commencing in 1990, 14 were built; in the decade commencing in 2000, 17 were built. 42 new crematoria have been built since 2011 and more are at the planning and construction stages.

6.12 The continued development of new crematoria is necessary, both to cater better for current demand and also to meet significant projected growth in future demand. The chart below combines *actual* deaths 1885 to 2019 with the ONS 2018-based principal national population *projections* for deaths from 2018 to 2117 for the UK.

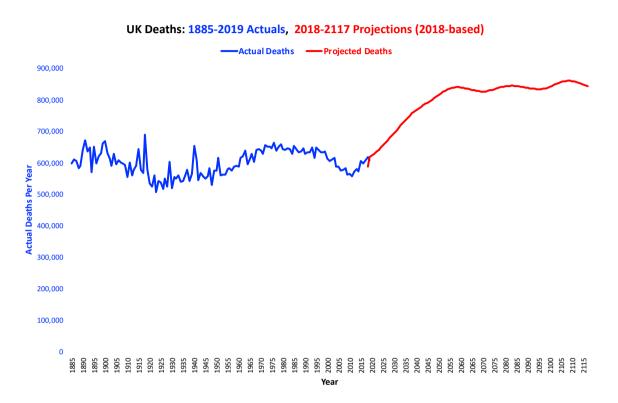


Figure 6: ONS UK Deaths: 1885-2019 Actuals and 2018-2117 Projected

6.13 The table below summarizes by decade the projected increase in the number of deaths, as contained within the ONS 2018-based estimates, published March 2020:

Year	Projected UK Deaths				
2020	623,390	Change from 2020			
2030	694,630	71,240	11.4%		
2040	767,825	144,435	23.2%		
2050	815,615	192,225	30.8%		
2060	839,500	216,110	34.7%		
2070	826,363	202,973	32.6%		
2080	843,117	219,727 35.2 %			
2090	838,103	214,713 34.4%			
2100	841,361	217,971	35.0%		

Figure 7: ONS 2018-based projected deaths by decade 2020 to 2117

6.14 The ONS Statistical Bulletin '*National population projections: 2018-based*', released on 21/10/2019, includes the following:

6.15 **1. Main points**

- The population of the UK is projected to increase by 3.0 million (4.5%) in the first 10 years of the projections, from an estimated 66.4 million in mid 2018 to 69.4 million in mid 2028.
- England's population is projected to grow more quickly than the other UK nations: 5.0% between mid 2018 and mid 2028, compared with 3.7% for Northern Ireland, 2.7% for Wales and 1.8% for Scotland.
- Over the next 10 years, 27% of UK population growth is projected to result from more births than deaths, with 73% resulting from net international migration; although net migration falls during this period, the number of deaths rises as those born in the baby boom after World War Two reach older ages.
- The UK population is projected to pass 70 million by mid 2031, reaching 72.4 million by 25 years into the projection (mid 2043).
- There will be an increasing number of older people; the proportion aged 85 years and over is projected to almost double over the next 25 years.
- The UK population growth rate is slower than in the 2016-based projections; the projected population is 0.4 million less in mid 2028 and 0.9 million less in mid 2043.

Statistician's comment

"The UK population is projected to grow by 3 million people by 2028. This assumes migration will have a greater impact on the size of the population than the combination of births and deaths. Although migration declines at first and the number of births is stable, the number of deaths is projected to grow as those born in the baby boom after World War Two reach older ages. The population is increasingly ageing and this trend will continue. However, because of the expected rise in the State Pension age to 67 years, it is projected that slightly fewer than one in five people will be of pensionable age in 2028, a similar proportion to today."

Andrew Nash, Population Projections Unit, Office for National Statistics.

- 6.16 The ONS project increasing numbers of deaths:
- 6.17 As Figure 2 [the chart below] shows, projected net international migration declines at first and then is constant from the year ending mid 2025. However, there is a steady increase in the number of deaths as people born in the baby boom generations after World War Two and in the 1960s reach older ages. This means that although net migration is constant, it represents an increasing proportion of the projected growth.

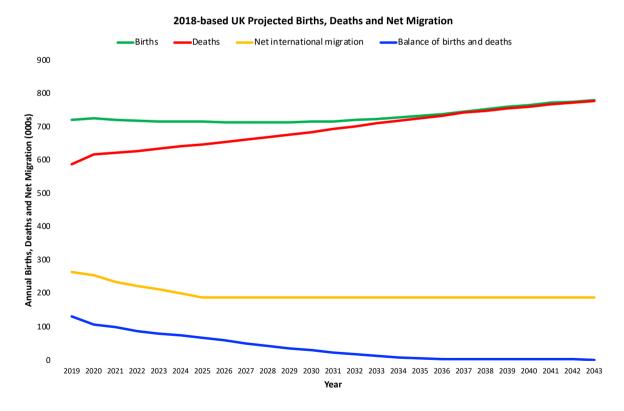
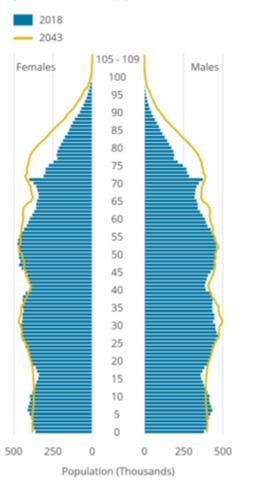


Figure 8: ONS 2018-based UK projected births, deaths and net migration

6.18 The ONS project a significant increase in the numbers of older people between 2018 and 2043, as illustrated in the chart below, (*Figure 3 in the ONS Bulletin*):



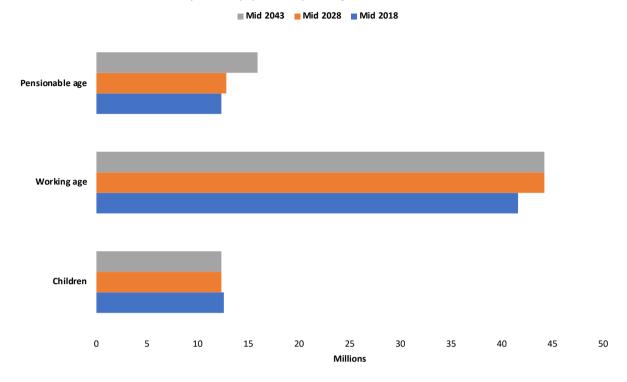
Age structure of the UK population, mid 2018 and mid 2043

Figure 9: Age structure of the UK mid 2018 and mid 2043

6.19 *More people at older ages*

In mid 2043, there are projected to be many more people at older ages. This partly reflects the 1960s baby boomers now being aged around 80 years but also general increases in life expectancy. In mid 2018, there were 1.6 million people aged 85 years and over; by mid 2043, this is projected to nearly double to 3.0 million.

6.20 The chart overleaf is presented as Figure 4 in the ONS Bulletin and shows projected UK population by life stage: Children, Working age and Pensionable age. The number in the latter group is projected to grow the most.



Projected UK population by life stage mid 2018 to mid 2043

Figure 10: Projected UK population by life stage mid 2018 tom mid 2043

6.21 Long-term assumptions

The 2018-based national principal projections are based on a set of long-term assumptions considered to best reflect recent patterns of future fertility, mortality and net migration. The assumptions are:

- Average UK completed family size will reach 1.78 children per woman by 2043, increasing to close to 1.79 later in the projection.
- By 2043, the annual improvement in UK mortality rates will be 1.2% for most ages for both males and females.
- From the year ending mid 2025 onwards, average annual net international migration to the UK will be plus 190,000.

- 6.22 The ONS Statistical Bulletin 'National population projections, mortality assumptions: 2018-based', released on 21/10/2019, provides detailed information on the principal and variant mortality assumptions used in the 2018-based national population projections (NPPs).
- 6.23 It sets out our rationale for setting the long-term improvement rates and how these have changed from the 2016-based NPPs. Our principal assumption for the UK is that mortality improvement rates will converge to 1.2% by 2043 for almost all ages and will remain at 1.2% thereafter. Lower rates of improvement are assumed for ages 91 years and over. This means that period life expectancy is projected to increase to 82.6 years by 2043 for males and 85.5 years for females.

Principal assumption of mortality improvements

For the 2018-based projections, the assumption is that annual rates of mortality improvement converge to 1.2% for ages 0 to 90 years by 2043 (the 25th year of the projections) and remain constant thereafter. For ages above 90 years, annual improvement rates are set to decline linearly from 1.2% to 0% between ages 91 and 109 years. For ages above 110 years, we assume a 0% improvement rate because there is little historical evidence of past mortality improvements at the oldest ages.

For 2018, the mortality improvement rates are derived rather than observed, as data for 2018 were not available at the time of setting the assumptions. Figure 1 [the chart below] shows the projected UK 2018-based annual mortality improvement rate for males and females in 2018, set against the assumed long-term target rate of mortality improvement in 2043.

The projected annual mortality improvement is 1.2% for most ages for both sexes by 2043

Projected annual mortality improvement rate in 2018 and assumed long term improvement rates in 2043 and beyond, males and females, UK

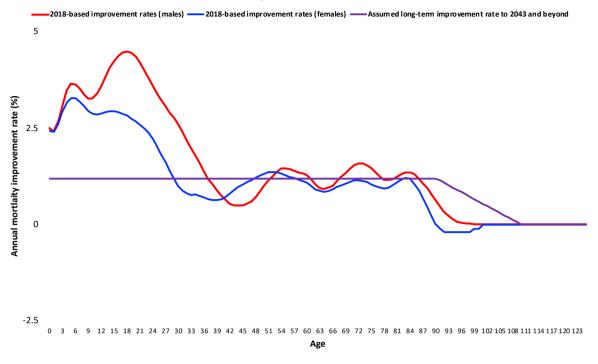


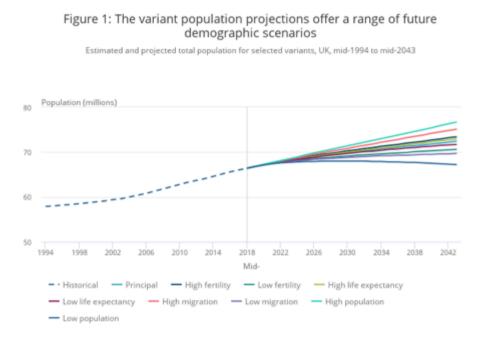
Figure 11: ONS projected annual mortality improvement rates

- 6.24 The 2043 target rates of improvement were set based on external demographic advice from the national population projections (NPPs) expert advisory panel and analysis by the Office for National Statistics (ONS) of past rates of improvement.
- 6.25 The Figures above illustrate national historical data and ONS 2018-based population projections for the future, which are based upon the work of ONS specialists and their expert advisory panel.
- 6.26 The ONS Statistical Bulletin 'National population projections, variant projections : 2018-based', released on 21/10/2019, includes a summary of the long-term assumptions for the projections:

	Low	Principal	High
Fertility (Total fertility rate by mid-2043)	1.58	1.78	1.88
Mortality (improvement rate by 2043)	0.0%	1.2%	1.9%
Migration (year ending mid-2025 onwards)	+90,000	+190,000	+290,000

Figure 12: Long-term assumptions for the 2018-based national population projections, UK

6.27 *Figure 1* from the ONS bulletin summarises the impact of the range of variants upon the size of the UK population and is reproduced below:



Source: Office for National Statistics – National population projections

Figure 13: Estimated and projected total population for selected variants mid 1994 to mid 2043

6.28 The table below summarises five of the ONS variant projections for deaths in England between 2020 and 2043 (mid-year):

Variant projection	2019-20	2042-43	2019/20-2	2042/43
No mortality improvement	495,547	719,612	224,065	45.2%
Low life expectancy	519,572	702,814	183,242	35.3%
High life expectancy	499,400	615,012	115,612	23.2%
Zero net migration	508,782	634,195	125,413	24.6%
Principal	509,540	648,695	139,155	27.3%

Figure 14: ONS variant projections for deaths in England

6.29 All of these data and projections, including variant ones, combine to provide clear evidence of increasing numbers of deaths. Additional new crematoria are required to meet the sustained and increasing demand for cremation in the UK.

7 The local context of demand for cremation

7.1 Current deaths

7.2 The chart below illustrates ONS numbers of deaths in 2019 by quinary age band in eight local authorities in the area surrounding the proposed crematorium at Turners Hill. The statistical link between increasing age and death is very evident:

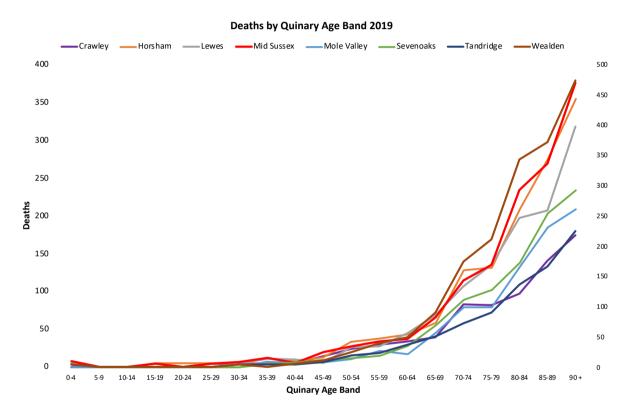


Figure 15: Deaths by quinary age band in 2019

7.3 The table below also shows the statistical link between increasing age and death by tabulating the proportions of total deaths in three broad age bands in these same local authority areas, with England as a whole for comparison.

Local Authority	0 to 64 years		65 to 84 years		85 years & over	
Crawley	132	17.6%	302	40.3%	316	42.1%
Horsham	162	12.3%	528	40.0%	629	47.7%
Lewes	138	11.8%	508	43.4%	525	44.8%
Mid Sussex	163	12.0%	550	40.5%	645	47.5%
Mole Valley	70	8.7%	337	42.1%	394	49.2%
Sevenoaks	99	8.8%	481	42.7%	546	48.5%
Tandridge	110	12.9%	352	41.3%	391	45.8%
Wealden	141	7.8%	819	45.3%	846	46.8%
Totals	1,015	11.1%	3,877	42.2%	4,292	46.7%
England	76,019	15.3%	222,575	44.8%	197,776	39.8%

Figure 16: Proportions of deaths in 2019 by three broad age bands

7.4 Projected population

7.5 The table below illustrates the ONS principal 2018-based projections for change in the population of all ages between 2020 and 2043 in the same local authority areas, with England as a whole included for comparison.

Area	Projected	Population	Projected Change		
Area	2020	2043	2020 to 2	2043	
Crawley	113,531	119,625	6,094	5.4%	
Horsham	145,250	169,478	24,228	16.7%	
Lewes	103,925	114,556	10,631	10.2%	
Mid Sussex	151,785	167,212	15,427	10.2%	
Mole Valley	87,095	88,233	1,138	1.3%	
Sevenoaks	121,415	130,791	9,376	7.7%	
Tandridge	88,285	94,564	6,279	7.1%	
Wealden	162,447	179,965	17,518	10.8%	
Subtotals	973,733	1,064,424	90,691	9.3%	
England	56,678,470	61,744,098	5,065,628	8.9%	

Figure 17: ONS 2018-based projected population change 2020 to 2043

- 7.6 In addition to the principal 2018-based subnational population projections, the ONS also publish variant population projections at subnational level:
 - High international migration
 - Low international migration
 - Alternative internal migration
- 7.7 Appendix 2 contains tables illustrating the impact of these variants upon projected population change in each geographical area, as in the table above. The table below summarises the impact of the four different projections upon the combined populations of all ages in the eight individual local authorities:

Deviation Variant	Projected	Population	Projected Change	
Projection Variant	2020	2043	2020 to	2043
Principal	973,733	1,064,424	90,691	9.3%
High International Migration	974,118	1,101,794	127,676	13.1%
Low International Migration	973,347	1,027,029	53,682	5.5%
Alternative Internal Migration	974,249	1,072,448	98,199	10.1%
Minimum	973,347	1,027,029	53,682	5.5%
Maximum	974,249	1,101,794	127,545	13.1%
Average	973,862	1,066,424	92,562	9.5%

Figure 18: Summary of ONS 2018-based variant projected population change 2020 to 2043

- 7.8 The lowest projected change in population results from the application of the Low international migration variant and the highest change results from the High international migration variant. The average change across all the variants is slightly higher than the Principal projection.
- 7.9 Whilst it is not possible to accurately predict future populations, the variants used in ONS 2018-based subnational population projections for the period 2020 and 2043 all predict an increase in the population of all ages of between **5.5%** and **13%** in the local authorities in the area surrounding the proposed crematorium at Turners Hill.

7.10 The two tables below similarly illustrate the impact of the four different variant projections upon projections for the combined populations of people aged 65 years and over, and 85 years and over, in the eight individual local authorities:

People aged 65 years and over					
Projections	Projected	Population	Projected Change		
	2020 2043		2020 to 2043		
Principal	216,328	306,701	90,373	41.8%	
High International Migration	216,345	308,720	92,375	42.7%	
Low International Migration	216,312	304,675	88,363	40.8%	
Alternative Internal Migration	216,632	309,973	93,341	43. 1%	
Minimum	216,312	304,675	88,363	40.8%	
Maximum	216,632	309,973	93,341	43. 1%	
Average	216,404	307,517	91,113	42.1%	

Figure 19: Summary of ONS 2018-based variant projected population change 2020 to 2043

People aged 85 years and over					
Projections	Projected	Population	Projected Change		
	2020	2043	2020 to	o 2043	
Principal	32,389	57,423	25,034	77.3%	
High International Migration	32,389	57,586	25,197	77.8%	
Low International Migration	32,389	57,260	24,871	76.8%	
Alternative Internal Migration	32,533	58,680	26,147	80.4%	
Minimum	32,389	57,260	24,871	76.8%	
Maximum	32,533	58,680	26,147	80.4%	
Average	32,425	57,737	25,312	78.1%	

Figure 20: Summary of ONS 2018-based variant projected population change 2020 to 2043

- 7.11 For the eight local authorities in the area surrounding the proposed crematorium at Turners Hill, for the period between 2020 and 2043 the four variants used in ONS 2018-based subnational population projections all predict an increase in the population:
 - aged 65 years and over of between 40.8% and 43.1%.
 - aged 85 years and over of between 76.8% and 80.4% in.

7.12 Projected deaths

7.13 The table below illustrates the ONS principal 2018-based projections for change in the number of deaths at all ages between 2020 and 2043 in the same local authority areas, with England as a whole included for comparison.

Area	Projected Deaths		Projected Change		
Aled	2020	2043	2020 to 2043		
Crawley	762	929	167	21.9%	
Horsham	1,400	2,021	621	44.4%	
Lewes	1,130	1,496	366	32.4%	
Mid Sussex	1,430	1,924	494	34.5%	
Mole Valley	893	1,086	193	21.6%	
Sevenoaks	1,130	1,370	240	21.2%	
Tandridge	857	1,109	252	29.4%	
Wealden	1,818	2,447	629	34.6%	
Subtotals	9,420	12,382	2,962	31.4%	
England	509,540	648,695	139,155	27.3%	

Figure 21: ONS 2018-based projected change in deaths 2020 to 2043

7.14 Appendix 2 contains tables illustrating the impact of the variants upon projected changes in numbers of deaths in each geographical area. The table below summarises the impact of the different projections upon the combined numbers of deaths at all ages in the eight individual local authorities:

Projections Variant	Projected Deaths		Projected Change	
Projections Variant	2020	2043	2020 t	o 2043
Principal projection	9,420	12,382	2,962	31.4%
High International Migration Variant	9,420	12,454	3,034	32.2%
Low International Migration Variant	9,420	12,309	2,889	30.7%
Alternative internal migration variant	9,437	12,604	3,167	33.6%
Minimum	9,420	12,309	2,889	30.7%
Maximum	9 <i>,</i> 437	12,604	3,167	33.6%
Average	9,424	12,437	3,013	32.0%

Figure 22: Summary of ONS 2018-based variant projected change in numbers of deaths 2020 to 2043

- 7.15 The variants used in ONS 2018-based subnational population projections all predict an increase in numbers of deaths of people of all ages between 2020 and 2043 of between **30.7%** and **33.6%** in the eight local authorities. The minimum figure is used elsewhere in this document to model the impact of increased deaths upon the capacity of crematoria to meet quantitative and qualitative need.
- 7.16 The two tables below similarly illustrate the impact of the different variant projections upon projections for the combined numbers of deaths of people aged 65 and over, and people aged 85 years and over, in the eight individual local authorities:

Projections Variant	Projected Deaths		Projected Change	
	2020	2043	2020 t	o 2043
Principal projection	8,326	11,526	3,200	38.4%
High International Migration Variant	8,326	11,570	3,244	39.0%
Low International Migration Variant	8,326	11,482	3,156	37.9%
Alternative internal migration variant	8,342	11,742	3,400	40.8%
Minimum	8,326	11,482	3,156	37.9%
Maximum	8,342	11,742	3,400	40.8%
Average	8,330	11,580	3,250	39.0%

Figure 23: ONS 2018-based variant projected numbers of deaths (65 and over) 2020 to 2043

Projections Variant	Projecte	d Deaths	Projected Change	
	2020	2043	2020 t	o 2043
Principal projection	4,666	7,300	2,634	56.5%
High International Migration Variant	4,666	7,318	2,652	56.8%
Low International Migration Variant	4,666	7,283	2,617	56.1%
Alternative internal migration variant	4,681	7,484	2,803	59.9%
Minimum	4,666	7,283	2,617	56.1%
Maximum	4,681	7,484	2,803	59.9%
Average	4,670	7,346	2,677	57.3%

Figure 24: ONS 2018-based variant projected numbers of deaths (85 and over) 2020 to 2043

- 7.17 For the eight local authorities in the area surrounding the proposed crematorium at Turners Hill, for the period between 2020 and 2043 the four variants used in ONS 2018-based subnational population projections all predict an increase in numbers of deaths:
 - aged 65 years and over of between 37.9% and 40.8%.
 - aged **85 years and over** of between **56.1%** and **59.9%**.

7.18 Summary of projected population and deaths

- 7.19 The comprehensive ONS data on population and deaths illustrated above and in Appendix 2 indicate that all variants of the ONS 2018-based subnational population projections predict between 2020 and 2043 in this area increases in both the population and number of deaths:
 - Population of all ages increase between **5.5%** and **13%**.
 - Number of deaths of people of all ages increase between **30.7%** and **33.6%**.
 - Population aged **65 years and over** increase between **40.8%** and **43.1%**.
 - Number of deaths of people aged 65 years and over increase between 37.9% and 40.8%.
 - Population aged **85 years and over** increase between **76.8%** and **80.4%**.
 - Number of deaths of people aged 85 years and over increase between 56.1% and 59.9%.
- 7.20 This demographic context underlines the need for the new crematorium at Turners Hill in order to meet both current and future quantitative and qualitative need for cremation among the growing and ageing local population.

- 7.21 In the High Court of Justice, Queen's Bench Division [CD 12.21], the Hon. Mrs Justice Patterson DBE referenced the importance of provision for future needs:
- 7.22 101. But there is no reason why the Council was not entitled to take into account future need and, indeed, the claimant did not seriously contend otherwise. Nor did it suggest any other uplift figure. Whether an uplift needed to be taken into account, whether it needed to be 20% and what weight to be given to it was entirely a matter of planning judgment for the decision maker. As one of the roles of the planning system is to secure provision of infrastructure to meet future needs as well as current needs it would be surprising if the defendant did not take future needs into account. There is no guidance to be followed on the calculation of capacity for future crematoria. In my judgment, the defendant adopted a rational and reasoned approach to the calculation of capacity and cannot be criticised for carrying out the exercise in the way that it did.⁴

⁴*R* (on the application of Timmins) v Gedling Borough Council & Another [2016] EWHC 220 (Admin)

8. Quantitative need for Turners Hill Crematorium: drive-time catchment analysis

8.1 Quantitative need is established by quantifying the population that would be in closer proximity to a new crematorium than to existing crematoria and by examining the current and future capacity for funerals available at existing crematoria. Consideration of proximity alone is insufficient, as there is little benefit for people to live in reasonable proximity of a crematorium that is working above its level of practical capacity, particularly during periods of peak demand. In this locality, examination of current and future capacity reveals an urgent need for additional provision to relieve the overcapacity working at the Surrey and Sussex Crematorium.

8.2 Funeral drive-times

- 8.3 The distance considered reasonable for people to travel in a funeral cortège to a crematorium has been considered at a number of planning appeals and also at a Competition Tribunal Appeal.
- 8.4 The Competition Appeal Tribunal Case No. 1044/2/1/04 Judgment of 6th July 2005 [CD 11.19] includes reference to the importance of travel times by car in relation to crematoria⁵:
- 8.5 199. ... Mourners at a funeral, many of whom are likely to be elderly, would not normally wish to travel long distances if that could be avoided; many elderly mourners may not have transport available to take them longer distances; extra travel is likely to increase the time needed, and also to add to the cost of the funeral in terms of fuel and labour costs; and there may be sentimental reasons for choosing the local crematorium, for example to facilitate subsequent visits to view a memorial tablet, to visit a garden of remembrance, or because a previous family member was

⁵ Office of Fair Trading v W. Austin & Sons & Ors [2005] CAT 25 (6 July 2005)

cremated there ...

207. In addition, there has been no challenge to the evidence, which emerges from the planning decision of 17 February 1999 relating to South Crofty plc in Cornwall, in which the planning inspector said:

"as a rule of thumb, the industry works on the basis that a funeral party should not have to undergo more than 30 minutes' drive to a crematorium."

- 8.6 In the Camborne Appeal Decision⁶ [CD 12.7], the Inspector Mike Robins overturned a decision by the Local Planning Authority to refuse planning consent for a new crematorium at Treswithan, Camborne, Cornwall and he stated:
- 8.7 29. In previous crematorium cases an industry standard, of 'rule of thumb', has been applied at 30 minutes travel time for the funeral cortège. It has not been rigidly applied in all cases and in this area, with its dispersed, low density population, I consider it need not be definitive of the populations served by the facility. Nonetheless, it provides a starting point for the assessment of the quality of service provided to the bereaved.
- 8.8 In the Swanwick Appeal decision⁷ [CD 12.8], the Inspector Harold Stephens stated:
- 8.9 24. Plainly the evidence shows there is a large gap in provision where currently there is no facility within 30 minutes drivetime. The appeal proposal would fill that gap. In coming to this view I agree that the Appellant has correctly applied a factor of 0.6 to normal road traffic speeds to take account of cortège speeds.

⁶ Appeal Ref. APP/D0840/A/09/2098108 Land at Race Farm, Puggis Hill, Treswithian, Camborne, Cornwall ⁷ Appeal Ref: APP/M1005/A/12/2188880 Land east of Derby Road, Swanwick, Derbyshire

- 8.10 In the Lach Dennis Appeal Decision⁸ [CD 12.9], the Inspector Richard Clegg stated:
- 8.11 41. Drawing on an appeal decision concerning a crematorium in Cornwall, the QNA (Quantitative Needs Assessment) refers to an industry guideline of a 30-minutes drive-time from a crematorium at cortège speed: this basis for a catchment area is also referred to in the appraisal of the proposal commissioned by the Council (Analysis of Application by Memoria Ltd AAM). Whilst the Action Group argued that the crematoria in the surrounding area serve local needs, the appropriateness of the 30-minutes drive-time was not disputed in the representations, and I consider that it provides a useful factor to apply in assessing need.
- 8.12 In the Halstead Appeal Decision⁹ [CD 12.10], the Inspector David Richards stated:
- 8.13 20. With regard to qualitative measures of need, evidence commissioned by the Appellant shows that some 130,000 140,000 people who currently live more than 30-minutes drive-time from a crematorium (at speeds appropriate to a funeral cortege) would be within 30 minutes of the appeal site.
- 8.14 In the Great Glen Appeal Decision¹⁰ [CD.12.3], the Inspector Paul Crysell stated:
- 8.15 8. A substantial population (350,000) lives within 30 minutes' drive time of Great Glen of which 160,000 would be closer to the proposed site than to an existing crematorium. Demographic changes indicate the catchment population will rise to 190,000 by 2031 increasing the demand for cremations from 1,051 to 1,234 per annum. Consequently, while there is strong opposition to the proposed scheme it is apparent that many respondents accept additional facilities are required. I agree because the evidence supports the provision of new facilities in this part of the County.

⁸ APP/A0665/A/12/2186911, Land south-west of Birches Lane, Lach Dennis Cheshire

 ⁹ Appeal Ref: APP/G2245/A/13/2210128 Land south of Orchard Barn, London Road, Halstead, TN14 7AD
 ¹⁰ Appeal Ref: APP/F2415/A/14/2211858 Land at London Road, Great Glen, Leicestershire LE8 9DJ

- 8.16 In the Northop Appeal Decision¹¹ [CD 12.12], the Inspector Vicki Hurst stated:
- 8.17 13. The appellant has carried out an alternative sites assessment focussing on previously developed land or that within an existing built up area within the defined catchment area based on the recognised 30 minute drive time.
 19. In terms of the site's sustainability credentials, the appeal site lies within a central location to the catchment area that it would serve. It would be closer than any other crematorium to over 140,000 people and would enable approximately 80,000 people to travel to the crematorium within 30 minutes. This would result in a significant mileage saving and associated reduction in CO2 emissions and would be beneficial to local well-being.
- 8.18 In the Leeds Appeal Decision¹² [CD 12.13], the Inspector David Cross stated:
- 8.19 22. With regards to cortege travel times to crematoria, the appellants have referred to an ideal upper limit of 30 minutes, whilst the Council has indicated that longer travel times may be appropriate, such as 45 minutes. Whilst there may not be an industry standard on travel times, the appellants have provided survey evidence which indicates that the majority of people consider that a journey over 30 minutes would be excessive. I have no reason to doubt the robustness of this survey and on that basis I consider that an ideal travel time of up to 30 minutes is an appropriate rule of thumb, particularly for urban areas where journey times to facilities are generally shorter.

24. However, whilst the distribution of that catchment population includes urban areas, a significant extent of the area includes areas to the north east of Leeds which is characterised by freestanding small towns and villages located in a rural setting, where longer journeys to facilities may be more typical. Within that context, I am not

¹¹ Appeal Ref: APP/A6835/A/15/3005992 Land at Kelsterton Lane, Connah's Quay CH7 6DW

¹² Appeal Decision APP/N4720/W/19/3233784 Land at Garforth Golf Range, Long Lane, Garforth, Leeds LS25 2DS

persuaded that the 30-minute drivetime should be seen as a definitive limit as, due to the nature of this area, longer drivetimes may be more acceptable to residents.

- 8.20 Whilst neither enshrined in statute nor planning policy, it is clear that a 30-minute funeral drive-time at 60% of normal traffic speeds, with a clear recognition that this may be extended in rural areas, has been held at Appeal to be one appropriate basis upon which to establish the quantitative need for a new crematorium.
- 8.21 A consumer survey undertaken to inform the Competition and Markets Authority Funeral Market Investigation¹³ [CD 11.20] further confirms the importance of funeral journey times to bereaved people:

8.22 The crematorium's location

89. The majority of consumers (81%) told us they had used the crematorium that was the closest crematorium to where the deceased had lived.

Cumulatively:

(a) Around three in ten respondents (28%) told us that the deceased had lived within a ten-minute drive time of the crematorium they used.

(b) Two-thirds of consumers (65%) told us that the deceased had lived within a twenty-minute drive time of the crematorium they used.

(c) Just over four-fifths of consumers (83%) told us that the deceased had lived within a thirty-minute drive time of the crematorium they used.

90. Where consumers had not used the crematorium closest to where the deceased lived (14%, n=53), this was most often because it was not the 'family crematorium', ie the crematorium they always/traditionally used (n=21).

8.23 The Competition and Markets Authority Funeral Market Investigation Final Report [CD 11.10] includes (at Table 16) the results of a survey undertaken by Westerleigh, and which is reproduced below:

¹³ Funerals Market investigation: Consumer Survey Results. Competition and Markets Authority. 30/1/2020

Why respondents chose a crematorium that was not their closest $\%$	%
Attractive and well-maintained buildings or grounds	[50-60]
Funeral director recommendation / advice	[20-30]
Had availability on preferred date/time	[20-30]
Located close to those attending the service (friends and family)	[20-30]
Was the family crematorium / the crematorium we have always or traditionally used	[10-20]
Range of facilities	[10-20]
Better reputation	[10-20]
Located close to where I live	[10-20]
Offered a longer duration for the service	[10-20]
More accessible: close to main roads, access roads, etc.	[10-20]
Able to meet faith/religious requirements	[5-10]
Greater capacity (for number of people attending service)	[5-10]
(Reallocated) Previous experience	[0-5]
Lower price	[0-5]
Don't know	[0-5]

Figure 25: Why respondents chose a crematorium that was not their closest.

- 8.23 The Competition and Markets Authority Funeral Market Investigation Final Report states:
- 8.25 4.48 We conclude that the geographic markets for crematoria services are local. As noted in paragraph 4.36, the precise scope of each geographic market is likely to vary depending on local factors. Based on the evidence set out above, for the purpose of our analysis of concentration and the assessment of competitive constraints, we have adopted an average geographic scope of 30 minutes' drive time at cortege speed from the crematorium. However, recognising that some evidence (in particular, survey evidence and the entry analysis) points towards a scope wider than a 30-minute drive time we have also considered a sensitivity of 40 minutes' drive time at cortege speed (given the arguments set out in the preceding paragraphs) in our analysis of concentration and in the assessment of local competitive constraints.¹⁴

¹⁴ Funerals Market Investigation: Final Report. Competition and Markets Authority. 18/12/2020

- 8.26 It is important to note that a 30-minute funeral drive-time is not the sole factor upon which establish need for a new crematorium , although it is highly relevant:
- 8.27 4.10 However, it is wrong to focus on driving time as a determining factor in the location of future crematoria and whether there is a need for a new facility; 30 minutes should not be used as an 'exclusion zone' within which no other facilities should be permitted. Indeed, if that were the case the Crooklands proposal (see Appendix PB1) would not have been approved in the context of the already-approved Milnthorpe facility the sites are about 8 km (5 miles) apart, or about 15 minutes' drive at normal speed.

4.11 Rather, and as is evident from the existing network of facilities (as above), it is not distance which determines the need for a facility in quantitative terms but the existence of sufficient population in an area to support a new facility, as well as other indicators of need such as the quality of existing provision.¹⁵[CD 11.18]

- 8.28 The general preference to use the nearest crematorium becomes evident when the development of a new crematorium brings people closer to a crematorium than they were previously and diverts cremations away from established crematoria.
- 8.29 The first chart overleaf illustrates how the opening a new crematorium in Lincolnshire at Alford in 2007 and the opening of a second new crematorium at Surfleet in 2013 diverted cremations away from Boston Crematorium (1966).
- 8.30 The second chart overleaf illustrates the similar impact in Kent upon Medway Crematorium (1959) resulting from the opening of Gravesend Crematorium in 2016.
- 8.31 These are just two of many examples of how the proximity of new crematoria influences the choices that people make when arranging a cremation funeral.

¹⁵ APP/C3430/W/15/3039163 Land off Holyhead Road (A41), Wergs, South Staffordshire. Proof of Evidence of Paul Burley February 2017

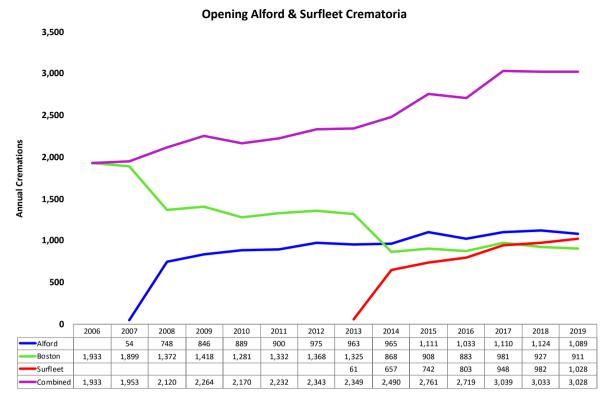
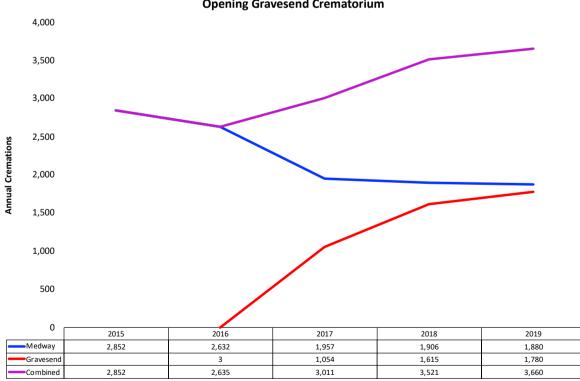


Figure 26: Opening Alford and Surfleet Crematoria



Opening Gravesend Crematorium

Figure 27: Opening Gravesend Crematorium

8.32 Drive-time catchment threshold populations and cremations

- 8.33 The catchment population of a proposed crematorium has been considered in some Appeal Decisions as a definitive and free-standing proof of need (ie, irrespective of any consideration of capacity at existing facilities) if it exceeds a certain threshold, typically 150,000.
- 8.34 The 150,000 threshold figure is based upon guidance issued by the Federation of Burial and Cremation Authorities (FBCA). The guidance is likely to have originated many years ago, possibly from the post-war era, when many new crematoria were developed and when the FBCA 'Code of Cremation Practice' was first published
- 8.35 The 2006 edition of the FBCA document, *'Recommendations on the Establishment of Crematoria'*, [CD 11.4c] states:

'Local authorities with a population of 150,000 or more would be in a position to provide and manage a crematorium with a reasonable expectation of operating on a sound financial basis after the initial years of repayment of capital and associated loan charges.'

8.36 However, the 2016 edition of the FBCA recommendations [CD 11.4b] revised the threshold:

'Local authorities with populations of approximately 120,000 or more would be in a position to provide and manage a crematorium with a reasonable expectation of operating on a sound financial basis after the initial years of capital repayment and associated loan charges.'

8.37 The FBCA provide these figures in relation to the financial viability of a new crematorium, without any reference to the need for its development. The guidance refers to populations within local authority areas, as if political boundaries were the determining factor in people's choice of crematorium. There is no specific reference

to proximity to existing or proposed crematoria and there is certainly no reference to funeral drive-time catchments.

8.38 Reliance upon a 150,000 catchment population threshold to prove need for a new crematorium appears to have originated from the Camborne Appeal in 2009. However, in the Camborne Appeal Decision¹⁶ [CD 12.7], the Inspector Mike Robins actually stated:

8.39 21 Because of its location, Penmount provides the only realistic choice for approximately 300,000 people, although it is agreed that a large proportion of these, notably those to the southwest on the Lizard and those to the west, in Penzance and beyond, are at some considerable distance from the facility.

51 I am conscious that my decision will result in a reduced number of cremations taking place at Penmount. However, I am satisfied that a population of approximately 150,000 people would be within realistic travel times of each facility; a population that is likely to increase. Penmount would therefore draw on a catchment that would be sufficient to ensure it remains into the future.

- 8.40 It is clear that the Inspector's reference to a catchment population of 150,000 concerns viability, rather than need. In particular, he was satisfied as to the continued viability of Penmount Crematorium. This is different from defining quantitative need for a new crematorium as a threshold catchment population of 150,000.
- 8.41 In the Leeds Appeal Decision¹⁷ [CD 12.13], the Inspector David Cross stated:

15. Population growth will inevitably lead to increased demand for funeral services, including cremations. However, based on the evidence before me, I consider that the 150,000 population figure per crematorium is an overly simplistic measure which relates to viability, and does not accurately reflect the need for crematoria or

¹⁶ Appeal Ref. APP/D0840/A/09/2098108 Land at Race Farm, Puggis Hill, Treswithian, Camborne, Cornwall

¹⁷ APP/N4720/W/19/3233784 Land at Garforth Golf Range, Long Lane, Garforth, Leeds LS25 2DS

potential capacity. I therefore give the evidence in respect of population growth and particularly the threshold identified by the appellants limited weight in favour of the proposal.

- 8.42 In the Rushcliffe Appeal Decision¹⁸[CD 12.11], the Inspector Thomas Hatfield referred to the two different population thresholds:
- 8.43 10. In addition, the appellant has submitted a Crematorium Need Assessment (Peter Mitchell Associates, May 2019). This identifies a catchment population of 124,803 people within a 45 minute drive-time of the proposed facility. Of these, 119,619 people would find the proposed crematorium to be their nearest. In this regard, I note that the Federation of Burial and Cremation Authorities (FBCA) advise¹⁹ that a population of around 120,000 is sufficient to provide and manage a crematorium with a reasonable expectation of operating on a sound financial basis. This is a reduction from the figure of 150,000 set out in previous FBCA guidance (published in 2006), which is quoted in a number of the appeal decisions that are before me. However, those Decisions were issued before the current iteration of the FBCA guidance was published in 2016. The figure of 120,000 represents current industry guidelines and is therefore the most appropriate basis on which to assess the proposed catchment in this case.
- 8.44 Whilst fully recognising that the threshold population figure relates to viability, the Inspector accepted as evidence of need that the impact of the new Rushcliffe Crematorium would be to significantly improve quantitative provision in the area, resulting in almost 120,000 people, who currently live within the 45-minute drivetime of an existing crematorium, finding the new crematorium to be their closest.
- 8.45 The relevance of drive-time catchment threshold populations lies primarily in the number of annual cremations derived from those populations, which are affected by variation in time and place and in mortality and cremation rates.

¹⁸ APP/P3040/W/19/3229908 Land to the east of Main Road, Cotgrave, Rushcliffe

¹⁹ A Guide to Cremation and Crematoria (FBCA 2016)

8.46 However, drive-time catchments should not be considered in isolation. Capacity at existing crematoria, particularly where they are over trading, is also a fundamental factor in determining quantitative need.

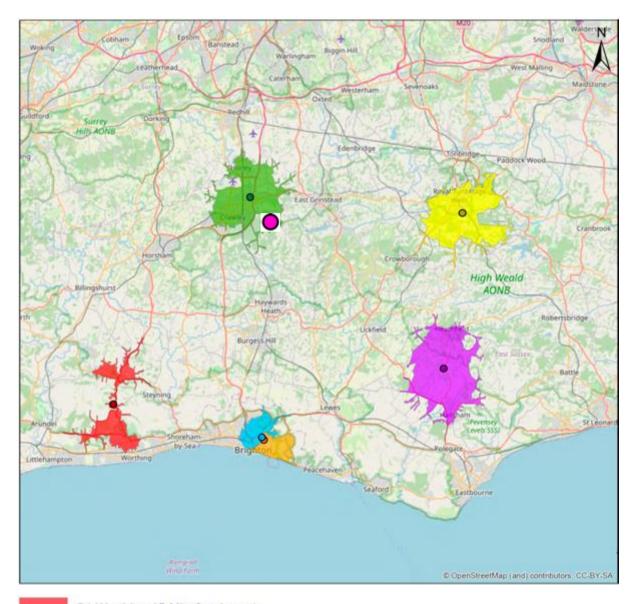
8.47 Funeral drive-time catchment mapping

- 8.48 Where a Funeral Director's hearse and limousine(s) lead a cortège of mourners' vehicles to a crematorium, travel speeds are often much lower than for normal traffic. This is mainly a consequence of drivers trying to keep the cortège together when negotiating junctions so that everybody finds their way to the crematorium and arrives together at the right time for the funeral service.
- 8.49 Even where there is no cortège following, a hearse conveying a coffin to a crematorium will drive at a similar reduced speed as a matter of respect and tradition.
- 8.50 Sophisticated computer software enables the identification of funeral travel times by road traffic and its graphical representation as isochrones and catchments, based upon population within each Lower Super Output Area (LSOA).
- 8.51 For my original need assessment report, transport planning specialists Vectos Limited used ESRI ArcGIS 10.4 and HERE software, together with associated ONS data relating to population and deaths in 2018 by LSOA, to produce isochrones within three different drive-time catchments: 15-minutes; 30-minutes; and 45-minutes, all at 60% of normal traffic speeds. These three distinct drive-times give a more comprehensive picture of the crematoria catchments than any single drive-time and better reflect the very varied population density of the area. For example, the two relatively large LSOAs lying between Turners Hill and the M23 have on average only 160 people per km², compared with the relatively small LSOAs on the Crawley side of the M23, which have on average 4,981 people per km².

- 8.52 The map extract, provided separately as CD 11.2, illustrates the location of existing crematoria and that of the proposed Turners Hill Crematorium, with the number of chapels at each site, and the variation in population density locally by LSOA in 2019. The map extract, provided separately as CD 11.3, illustrates local authority boundaries and the 45-minute drive-time catchments of the various crematoria..
- 8.53 The drive-time catchment mapping and associated data on population and deaths are valuable tools in understanding crematoria catchments. The shape and extent of each catchment illustrated reflects population density and the characteristics of the road network. It also reflects wherever the selected drive-time extends to the mid-way points to another crematorium. These points constrain the catchment before it reaches the full extent of the chosen drive-time. The longer the drive-time, the greater the probability of it being constrained in this way. The mapping thus illustrates catchments as constrained by surrounding catchments.
- 8.54 The drive-time catchment software logically allocates people to their nearest crematorium. However, where the difference in journey times between different crematoria is relatively small, a range of other factors including family preference may influence choice to a greater extent than journey time. Examples of such factors are featured in Table 16 of the CMA's Final Report, reproduced earlier in this section of this proof of evidence.
- 8.55 The drive-time catchment mapping and associated data on catchment populations and deaths are presented below in two different scenarios:
 - Scenario 1 Existing provision: existing crematoria
 - Scenario 2 Proposed provision: existing crematoria, *plus* the proposed Turners Hill Crematorium.

8.56 Existing provision – scenario 1

- 8.57 There are a number of existing crematoria available to the people living in the area under consideration. One of them, Wealden Crematorium at Horam, opened in May 2019 and data on its annual cremations is thus not yet available. When a death occurs within the catchment area of the proposed new Turners Hill Crematorium, bereaved families living locally are very unlikely to make a long journey past either the proposed or the existing crematoria in order to reach more distant crematoria.
- 8.58 It is important to note that the catchment areas of the five selected crematoria are, in turn, constrained by the catchments of 13 other crematoria outside of the immediate search area. These are Beckenham, Charing, Chichester, Croydon, Eastbourne, Eltham, Gravesend, Guildford, Hastings, Leatherhead, Maidstone, Medway and Woking. The catchments of these other crematoria have all been taken into account in the production of the figures below showing catchments, populations and deaths. The isochrones and associated data thus all relate to the constrained catchments of the four key crematoria.
- 8.59 The three images below illustrate the 15, 30 and 45-minute drive-time isochrones and constrained catchments at 60% of normal traffic speeds around the existing crematoria serving the wider area around the proposed Turners Hill Crematorium. The location of the proposed Turners Hill Crematorium is also illustrated thus:



 S1 Worthing 15 Min Catchment

 S1 Wealden 15 Min Catchment

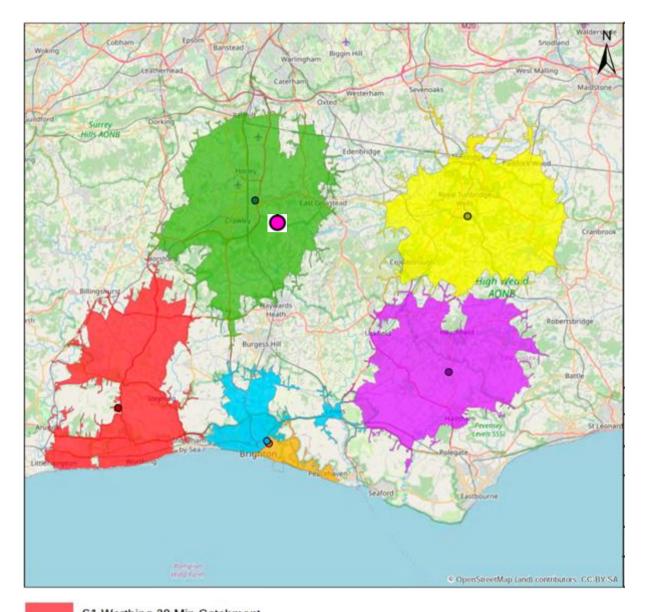
 S1 Tunbridge Wells 15 Min Catchment

 S1 The Downs 15 Min Drivetime

 S1 Surrey and Sussex 15 Min Catchment

 S1 Woodvale 15 Min Catchment

Figure 28: 15-minute drive-time catchments of existing crematoria



S1 Worthing 30 Min Catchment
S1 Wealden 30 Min Catchment
S1 Tunbridge Wells 30 Min Catchment
S1 The Downs 30 Min Drivetime
S1 Surrey and Sussex 30 Min Catchment
S1 Woodvale 30 Min Catchment

Figure 29: **30**-minute drive-time catchments of existing crematoria

Peter Mitchell Associates. April 2021 Page 54 of 162



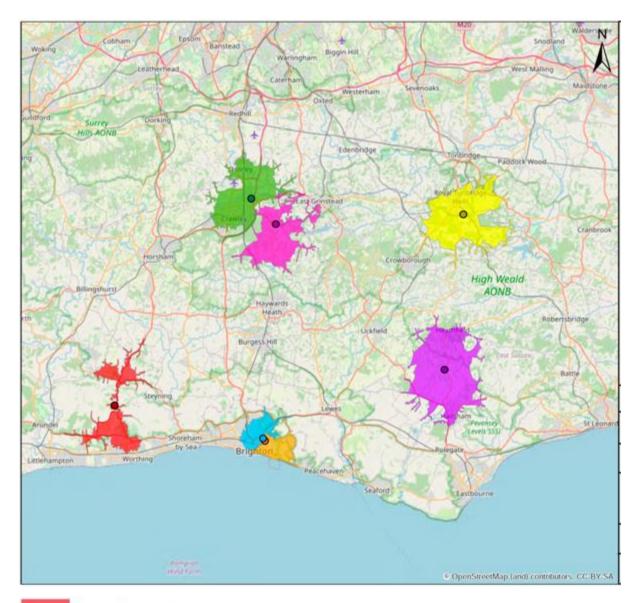
S1 Worthing 45 Min Catchment
S1 Wealden 45 Min Catchment
S1 Tunbridge Wells 45 Min Catchment
S1 The Downs 45 Min Drivetime
S1 Surrey and Sussex 45 Min Catchment
S1 Woodvale 45 Min Catchment

Figure 30: 45-minute drive-time catchments of existing crematoria

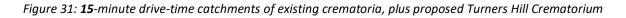
Peter Mitchell Associates. April 2021 Page 55 of 162

8.60 Proposed provision - scenario 2

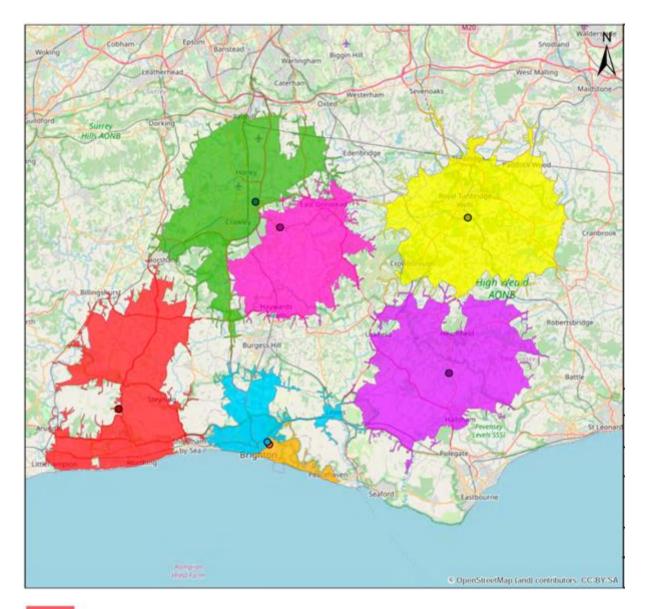
8.61 The three images below illustrate the 15, 30 and 45-minute drive-time isochrones at 60% of normal traffic speeds around the existing crematoria, together with those for the proposed new Turners Hill Crematorium. When a death occurs within the catchment area of the proposed new crematorium, bereaved families living locally are very unlikely to make a long journey past either the proposed or the existing crematoria in order to reach more distant crematoria.



S2 Worthing 15 Min CatchmentS2 Wealden 15 Min CatchmentS2 Turners Hill 15 Min CatchmentS2 Tunbridge Wells 15 Min CatchmentS2 The Downs 15 Min DrivetimeS2 Surrey and Sussex 15 Min CatchmentS2 Woodvale 15 Min Catchment



Peter Mitchell Associates. April 2021 Page 57 of 162



S2 Worthing 30 Min CatchmentS2 Wealden 30 Min CatchmentS2 Turners Hill 30 Min CatchmentS2 Tunbridge Wells 30 Min CatchmentS2 The Downs 30 Min DrivetimeS2 Surrey and Sussex 30 Min CatchmentS2 Woodvale 30 Min Catchment

Figure 32: 30-minute drive-time catchments of existing crematoria, plus proposed Turners Hill Crematorium



S2 Worthing 45 Min CatchmentS2 Wealden 45 Min CatchmentS2 Turners Hill 45 Min CatchmentS2 Tunbridge Wells 45 Min CatchmentS2 The Downs 45 Min DrivetimeS2 Surrey and Sussex 45 Min CatchmentS2 Woodvale 45 Min Catchment

Figure 33: **45**-*minute drive-time catchments of existing crematoria, plus proposed Turners Hill Crematorium*

Peter Mitchell Associates. April 2021 Page 59 of 162

8.62 The three tables below illustrate the drive-time catchment populations and numbers of deaths in 2018 for both the current and the proposed provision of crematoria, together with the variation between existing and proposed.

Cromotorium		Population		Deaths			
Crematorium	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	56,692	80,053	103,468	566	912	1,101	
Brighton Woodvale	96,967	236,349	297,551	785	2,326	2,855	
Surrey & Sussex Crematorium	113,548	281,988	423,773	880	2,123	3,297	
Tunbridge Wells	61,495	163,417	251,769	552	1,378	2,185	
Wealden	25,519	68,840	109,419	249	641	1,093	
Worthing	42,481	250,172	308,400	545	3,115	3,665	
Totals	396,702	1,080,819	1,494,380	3,577	10,495	14,196	

Figure 34: Population and deaths within drive-time catchments of **existing** crematoria provision

Gromotorium		Population		Deaths			
Crematorium	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	56,692	80,053	103,468	566	912	1,101	
Brighton Woodvale	96,967	236,349	292,441	785	2,326	2,809	
Surrey & Sussex Crematorium	111,801	237,215	316,426	868	1,748	2,399	
Tunbridge Wells	61,495	163,417	245,814	552	1,378	2,075	
Turners Hill Crematorium	11,755	88,305	122,916	104	807	1,097	
Wealden	25,519	68,840	104,915	249	641	1,050	
Worthing	42,481	250,172	308,400	545	3,115	3,665	
Totals	406,710	1,124,351	1,494,380	3,669	10,927	14,196	

Figure 35: Population and deaths within drive-time catchments of **proposed** crematoria provision

Crematorium		Populatio	n	Deaths			
Crematonum	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs							
Brighton Woodvale			(5,110)			(46)	
Surrey & Sussex Crematorium	(1,747)	(44,773)	(107,347)	(12)	(375)	(898)	
Tunbridge Wells			(5,955)			(110)	
Turners Hill Crematorium	11,755	88,305	122,916	104	807	1,097	
Wealden			(4,504)			(43)	
Worthing							
Totals	10,008	43,532	0	92	432	0	

Figure 36: **Change** in population and deaths between **existing and proposed** crematoria provision

- 8.63 For the proposed new Turners Hill Crematorium, the tables above illustrate that:
 - **11,755** people live within 15 minutes' drive-time, including
 - **10,008** living within 15 minutes' drive-time of a crematorium for the first time
 - **88,305** people live within 30 minutes' drive-time, including
 - **43,532** living within 30 minutes' drive-time of a crematorium for the first time
 - **122,916** people live within 45 minutes' drive-time
- 8.64 Within each drive-time catchment in 2018, all of these people would have lived closer to the Turners Hill Crematorium than to any other crematorium.
- 8.65 The areas of residence and numbers of the population that will benefit through proximity to the new crematorium are identified in the table below:

Local Authority	15 Mi	15 Mins		ns	45 Mins		
Local Authority	Population	Deaths	Population	Deaths	Population	Deaths	
Tandridge			1,956	19	1,956	19	
Wealden			6,381	107	11,101	146	
Mid Sussex	11,755	104	79,968	681	102,935	877	
Lewes					6,924	55	
Total	11,755	104	88,305	807	122,916	1,097	

Figure 37: Local authority populations served by proposed Turners Hill Crematorium

8.66 The table below illustrates the proportions of the total population of each local authority area that will benefit through proximity to the new crematorium:

	Population 2018						
Local Authority	Total	15 Mins	30 Mins	45 Mins			
Tandridge	87,496	0.0%	2.2%	2.2%			
Wealden	152,642	0.0%	4.2%	7.3%			
Mid Sussex	149,716	7.9%	53.4%	68.8%			
Lewes	102,744	0.0%	0.0%	6.7%			

Figure 38: Local authority populations served by proposed Turners Hill Crematorium

- 8.67 Based purely upon drive-times, it is clear that the proposed new Turners Hill Crematorium would primarily benefit the residents living in Mid Sussex District Council's area.
- 8.68 However, this proof of evidence has already noted that, whilst a major influence, proximity is not the sole factor driving choice of crematorium. Table 16 in the CMA's Final Report, reproduced earlier, provides fourteen reasons why respondents to a survey chose a crematorium that was not their closest.
- 8.69 It is likely that a reasonable proportion of the significant number of people living in and around Crawley, Horsham and other areas may well chose to drive a short distance beyond their nearest crematorium, in view of clear qualitative benefits offered at the proposed Turners Hill Crematorium.
- 8.70 It is also clear that, in terms of its impact upon existing crematoria, the greatest impact of the proposed new Turners Hill Crematorium would be upon Surrey and Sussex Crematorium. There would be no impact upon Worthing and little impact upon the crematoria in Brighton and the Wealden Crematorium, as these crematoria are relatively distant from the proposed new Turners Hill Crematorium.

8.71 Alternative drive-time catchment analysis

- 8.72 In a report commissioned by Mid Sussex District Council, Beacon Dodsworth (BD) present alternative drive-time catchment maps and data, using different software than that used by Vectos and basing the analysis upon Output Areas(OAs).
- 8.73 As OAs are smaller geographical units than the LSOAs used by Vectos, BD make the reasonable point that their results are more refined. BD also make a number of other points relating to the catchment analysis by Vectos.
- 8.74 It is not proportionate to divert the Inquiry into a detailed analysis of the different methodologies used by Vectos and BD, as this will not shed light on the extent to which the Surrey and Sussex Crematorium is currently (and will in the future) over-trade, and because the conclusions to be drawn from the two analyses are very similar on the material aspects. Thus, the tables below are presented to illustrate the results of their alternative analyses and to assess impact upon the level of quantitative need for the proposed Turners Hill Crematorium.

8.75 The three tables below illustrate BD's data for Scenario 1 (existing provision), Scenario 2 (proposed provision) and the variation between them:

Crematorium		Population		Deaths			
Crematorium	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	56,438	95,730	98,202	513	906	928	
Brighton Woodvale	218,364	330,844	347,572	1,541	2,699	2,808	
Surrey & Sussex Crematorium	158,609	349,744	401,860	1,191	2,907	3,424	
Tunbridge Wells	85,146	204,927	264,786	830	1,895	2,435	
Wealden	30,637	62,625	75,281	391	739	877	
Worthing	129,156	282,765	289,940	1,545	3,462	3,531	
Totals	678,350	1,326,635	1,477,641	6,011	12,608	14,003	

Figure 39: Population and deaths within drive-time catchments of existing crematoria provision

Cremeterium		Population		Deaths			
Crematorium	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	56,438	95,730	98,202	513	906	928	
Brighton Woodvale	218,364	330,844	341,694	1,541	2,699	2,763	
Surrey & Sussex Crematorium	147,873	273,824	289,550	1,098	2,120	2,311	
Tunbridge Wells	85,146	204,716	262,046	830	1,893	2,401	
Turners Hill	40,489	114,978	122,234	376	1,134	1,205	
Wealden	30,637	62,625	73,975	391	739	862	
Worthing	129,156	282,765	289,940	1,545	3,462	3,531	
Totals	708,103	1,365,482	1,477,641	6,294	12,953	14,001	

Figure 40: Population and deaths within drive-time catchments of **proposed** crematoria provision

Crematorium		Populatio	n	Deaths			
Crematonum	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	0	0	0	0	0	0	
Brighton Woodvale	0	0	(5,878)	0	0	(45)	
Surrey & Sussex Crematorium	(10,736)	(75,920)	(112,310)	(93)	(787)	(1,113)	
Tunbridge Wells	0	(211)	(2,740)	0	(2)	(34)	
Turners Hill	40,489	114,978	122,234	376	1,134	1,205	
Wealden	0	0	(1,306)	0	0	(15)	
Worthing	0	0	0	0	0	0	
Totals	29,753	38,847	0	283	345	(2)	

Figure 41: Variation in population and deaths between existing and proposed crematoria provision

8.76 The table below summarises and compares Vectos' and BD's numbers for drive-time catchment populations for the proposed Turners Hill Crematorium:

	Popul	ation				
Vectos	Beacon Dodsworth	Average	Difference	Description		
11,755	40,489	26,122	28,734	People living within 15 minutes' drive-time		
10,008	29,753	19,881	19,745	People living within 15 minutes' drive-time of a crematorium for the first time		
88,305	114,978	101,642	26,673	People living within 30 minutes' drive-time		
43,532	38,847	41,190	(4,685)	People living within 30 minutes' drive-time of a crematorium for the first time		
122,916	122,234	122,575	(682)	People living within 45 minutes' drive-time		

Figure 42: Comparison of drive-time catchment populations

- 8.77 Compared with the original analysis by Vectos included in the Need Assessment Report, BD's analysis indicates that significantly more people will live within both the 15 minute and 30 minutes' drive-time catchments of Turners Hill Crematorium.
- 8.78 There is very close agreement on the number of people living within the 45 minutes' drive-time of Turners Hill Crematorium.
- 8.79 The data from both specialist companies originate independently from different sources and derive using different methods. This parallel analysis provides very strong evidence that over 122,000 people will find Turners Hill Crematorium to be their closest. Particularly when considered in the light of the analysis of capacity levels at the Surrey and Sussex Crematorium in the next section, this demonstrates the significant quantitative need for the proposed Turners Hill Crematorium.
- 8.80 The isochrones and associated data on population and deaths are valuable tools in understanding crematoria catchments. It is entirely logical that people will generally choose their nearest crematorium. However, in a situation such as Brighton, where Woodvale and The Downs crematoria are located in very close proximity, the difference in travel times is often only slight.

- 8.81 The drive-time software logically allocates people to their closest crematorium However, it must be recognised that other factors as already discussed rather than simply journey time, may well play a greater part in influencing choice particularly where the difference in journey time is only a matter of a few minutes.
- 8.82 In the case of differences in journey times to the Surrey and Sussex compared with Turners Hill, familiarity with the Surrey and Sussex and a family tradition of holding funerals there may well override any saving in funeral journey time to Turners Hill. Alternatively, some people may choose to make a longer funeral journey to Turners Hill for reasons such as the greater privacy provided by a single chapel crematorium with hour long service intervals. The key issue is that they will be able to exercise choice.

8.83 Joint catchments

8.84 The table below uses data from both Vectos and BD to compare the existing joint catchments of The Downs and Woodvale with the catchment of Surrey and Sussex Crematorium.

Crematorium	Рори	ulation - Ve	ectos	Population - BD			
Crematorium	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	56,692	80,053	103,468	56,438	95,730	98,202	
Brighton Woodvale	96,967	236,349	297,551	218,364	330,844	347,572	
Combined	153,659	316,402	401,019	274,802	426,574	445,774	
Surrey & Sussex	113,548	281,988	423,773	158,609	349,744	401,860	

Figure 43: Existing drive-time catchment populations

8.85 The table below compares the proposed joint catchments of The Downs and Woodvale with the joint catchments of Surrey and Sussex and Turners Hill.

Crematorium	Рор	ulation - Ve	ectos	Population - BD			
Crematorium	15 Mins	30 Mins	45 Mins	15 Mins	30 Mins	45 Mins	
Brighton The Downs	56,692	80,053	103,468	56,438	95,730	98,202	
Brighton Woodvale	96,967	236,349	292,441	218,364	330,844	341,694	
Combined	153,659	316,402	395,909	274,802	426,574	439,896	
Surrey & Sussex	111,801	237,215	316,426	147,873	273,824	289,550	
Turners Hill	11,755	88,305	122,916	40,489	114,978	122,234	
Combined	123,556	325,520	439,342	188,362	388,802	411,784	

Figure 44: Proposed drive-time catchment populations

- 8.86 It is evident from the tables above that, in both scenarios, a population of over 400,000 people is served by two, twin-chapel crematoria at Brighton.
- 8.87 However, a separate population of over 400,000 people is currently being served by only one, twin-chapel crematorium, the Surrey and Sussex at Crawley. This accounts for the high levels of demand at the Surrey and Sussex.
- 8.88 In 2019, a total of 2,747 cremation funerals, , excluding direct cremations, were held at The Downs and Woodvale, equating to an average of 687 funerals per chapel per year.
- 8.89 In 2019, 2,841 cremation funerals were held at the Surrey and Sussex, excluding direct cremations, equating to 1,420 funerals per chapel, over twice as many as at the Brighton crematoria.
- 8.90 The proposed Turners Hill Crematorium will help to address this imbalance by providing additional capacity for funerals from this large catchment population.

9. Quantitative need for Turners Hill Crematorium: factors affecting capacity

9.1 Technical capacity – number of cremators

- 9.2 The technical capacity of a crematorium is not assessed by the number of cremators it has, nor how many cremations the cremators can undertake in any given period.
- 9.3 Traditionally, the FBCA's 'Code of Cremation Practice' required that each coffin and its contents should be cremated on the same day as the funeral service at the crematorium. Compliance with this requirement influenced the number of cremators installed and the arrangements for staff overtime working at each crematorium. Busy crematoria with more than one chapel installed as many as six cremators to enable same-day cremation. Some crematoria charged higher fees for late afternoon funerals to offset the costs of staff overtime working.
- 9.4 However, in the light of concerns about the environmental impact of cremation, the FBCA's 'Code of Cremation Practice' was revised in 1999 and further revised in 2005 to permit cremation 'as soon as practicable', but not necessarily on the same day as the funeral or the delivery of the coffin to the crematorium. Similarly, the 'Guiding Principles for Burial and Cremation', published by the Institute of Cemetery and Crematorium Management (ICCM), requires cremation to take place 'no later than 72 hours after the service of committal'.
- 9.5 The high numbers of excess deaths during the current coronavirus pandemic, together with restrictions on the numbers of mourners permitted to attend crematoria, has demonstrated that the capacity of crematoria to cremate the dead does have a degree of flexibility. Many crematoria have greatly extended the normal hours of operation of their cremators and introduced rota working by cremator technicians to cope with the very high levels of demand.

9.6 Technical capacity – funeral service slots

- 9.7 Crematorium capacity is assessed by the number of funeral services that may be accommodated in the crematorium's chapel(s).
- 9.8 The theoretical maximum number of funerals that each crematorium can accommodate is readily calculated by multiplying the number of funeral slots available per day by 252 working days per year, i.e. Mondays to Fridays, excluding public holidays. This is the '**technical capacity**' of a crematorium.
- 9.9 In the Swanwick Appeal decision²⁰ [CD 12.8], the Inspector Harold Stephens stated:
- 9.10 23. A number of objectors have questioned the Appellant's evidence of need, referring to the statements by existing operators of crematoria at Tunbridge Wells, Medway and Eltham that they are currently operating below capacity. While it may be that over a period of a year, there are untaken slots which are theoretically available, this doesn't take account of seasonal fluctuations in mortality which affect levels of demand.

30 The consensus amongst funeral directors was that unacceptable delays of 2 or 3 weeks are encountered during the winter months. The employees or operators of the existing crematoria disagree. However, those employees or operators have a vested interest in painting a rosy picture of their own operations.

31. The four existing crematoria have technical capacity when looking at their operation over any particular year, but the fact that Chesterfield crematorium, for example, has plenty of availability in the summer months, or at 16:30 hours on a winter's afternoon is of little comfort or use to those needing to book a funeral at the busiest time of the year at a time of day that would actually allow friends and family to attend. The technical capacity of the four crematoria does not bring people who currently live beyond a reasonable distance to a crematorium any closer to that crematorium. Plainly, there is a quantitative and qualitative need in this case.

²⁰ Appeal Ref: APP/M1005/A/12/2188880 Land east of Derby Road, Swanwick, Derbyshire.

32. While the operators of existing facilities have stated that they are operating below capacity, I consider there is convincing evidence of seasonal variations which can give rise to waiting times of 2 - 3 weeks. In my judgment the provision of a crematorium facility in this location would be a considerable benefit to the wider population served by the new facility.

- 9.11 Operators of existing crematoria, whether local authorities or private companies (such Dignity, which operates both Surrey and Sussex and The Downs), do not welcome the potential loss of funerals and resultant income relating to cremations and memorials at their crematoria that may result from the development of a new crematorium in the area. Under such circumstances, unused technical capacity may be highlighted to suggest that there is no need for a new crematorium.
- 9.12 In the Crooklands Appeal²¹ [CD 12.14], the Inspector M Seaton stated:
- 9.13 11. I am mindful that the quantitative need for a crematorium has been disputed by interested parties on the basis that there is capacity at existing crematoria. A report submitted by an interested party challenges the premise that existing facilities in Lancaster and Barrow-in-Furness are working to capacity, on the basis of a reported conversation from February 2015 with the manager of the Lancaster & Morecombe Crematorium. However, I am mindful that it has generally been held in other appeal decisions that a crematorium operating at 100% capacity is a nominal or theoretical figure due to the technical limitations of equipment and the unpopularity of certain slots during the day. Furthermore, whilst the opening of a crematorium within South Lakeland may have an impact on the business and demand for existing crematoria further away, this must be balanced against the qualitative benefit of reducing the need to travel.

²¹ Appeal Ref: APP/M0933/W/15/3135606 Land to the N of J36 of the M6, adj. to the A65 near Crooklands

9.14 Weekend Funerals

- 9.15 Weekend funeral service times at crematoria are not the norm: they are relatively unusual and are often offered on mornings only and on a limited basis, such as subject to staff availability. The private sector, including Dignity, tend to offer weekend funeral service times at their crematoria, but local authorities less so.
- 9.16 Chart 5.2 shows that private sector providers tend to have slightly longer opening hours than local authority crematoria. Local authority crematoria are also much more likely to never open at weekends. Where they do open there can often be limitations, for example, insisting that the first booking made is the 9am slot, the next booking made at 9.30 and so on, meaning there is no choice of time. In our in-depth interviews various industry figures reported that local authorities had less scope to be flexible in their opening hours because this might involve paying staff overtime payments for which there is no budget available.

The data for operational hours are skewed by the fact that many crematoria do not have 'regular' weekend hours. Rather, they open at weekends by request, therefore it's not included in our operational hours data for example, it is possible to have a weekend service at any Dignity crematorium, which is reflected in chart 5.2 weekend opening, but because they do not have regular hours this is not reflected in the operational hours, other operators may be in a similar position.²²

- 9.17 In my experience, Funeral Directors and Officiants, like everyone else, appreciate a break from their work. Sufficient capacity at crematoria at core times during the the five-day week greatly reduces the need to arrange a weekend funeral at a crematorium.
- 9.18 The Chilterns Crematorium, operated by a local authority Joint Committee, offers Saturday funerals. This twin-chapel crematorium is unusual in that its on-line booking diary includes historic data.

Peter Mitchell Associates. April 2021 Page 71 of 162

²² 'Cost, Quality, Seclusion and Time'. Report by Trajectory on UK crematoria provision. November 2018

9.19 An analysis of all 1,135 funeral bookings between 2nd January and 31st March 2018 inclusive, a period selected as representing one of relatively high demand, shows that only 26 funerals, 2.3% of the total, took place on a Saturday. This was a busy period, with one chapel averaging 9.2 funerals per weekday and the other 8.2 funerals. This is a clear demonstration of the low level of demand for Saturday funerals.

9.20 Core or Practical Capacity

- 9.21 It is widely accepted and understood in the bereavement services sector that there are 'core' funeral times in the middle part of the day, that are generally preferred by bereaved people. This is certainly evident to me through my experience as a crematorium manager and my work as a consultant.
- 9.22 Holding funerals at crematoria at these core times avoids Funeral Directors and families having to travel to and from the crematorium in peak traffic conditions, which make it particularly challenging to keep a funeral cortège together. Funeral Directors and mourners require time to prepare for a funeral before a cortège can set off. Peak traffic conditions exacerbate the challenges faced by mourners travelling from outside the immediate area to attend the funeral.
- 9.23 In my view, based on my long experience working in this field, core times at crematoria are funerals commencing at any time between 10.30am and 3.30pm on weekdays, regardless of the service interval and duration.
- 9.24 Westerleigh adopt a similar definition: funerals commencing between 10.30am and 3.00pm.
- 9.25 Core service times are the ones most likely to be booked first. If a core time is not available on the day of choice, people will often select a later day to be able to hold the funeral at a time that suits their particular circumstances, including attendance by relatives outside of the immediate area.
- 9.26 The number of core times available is referred to as the 'core capacity' or 'practical capacity' of a crematorium, in contrast to its 'technical capacity'. The greater the number of core times per day the greater the practical (core) capacity of the crematorium. A wider definition of core times enables a crematorium to appear to be working at lower levels of practical (core) capacity than is actually the case.

- 9.27 As with the 30-minute drive-time at 60% of normal traffic speeds, the issue of core times at crematoria has been discussed at a number of planning appeals. Dignity's evidence for the Essington appeals [CD 11.16] was to the following effect (supporting an identification of core slots as those between 10am and 3pm):
- 9.28 6.31 A further important factor to consider, when assessing need, is the issue of core slots. Generally, bereaved families prefer to book a service, which is held at around the middle of the day. To illustrate this point, Dignity has undertaken a 6 year analysis on chapel time usage for the Telford Crematorium.

6.32 The results are very clear. There is a distinct and consistent preference for the slots across the middle of the day i.e. 10am – 3pm, followed by non core slots of 9am and 4pm. As can be seen, there is very little take-up of the slot at 9am.

6.33 The impact of core times on funeral delays is a consequence of the popularity of the core slots i.e. families are prepared to wait because of the non-availability of core slots. By way of example, in 2017, utilisation of the 9am slot at Telford Crematorium was still only 22% notwithstanding that the average period between the date of death and the date of cremation was 20 days.

6.34 Dignity has experienced similar utilisation at other sites and, even through the introduction of reduced fees for 9am slots has experienced little significant uptake of these slots.²³

9.29 Westerleigh's evidence to the Essington appeals [CD 11.17] included:

2.6 However, crematoria cannot work at 100% of their annual core capacity as it is impractical to fill every slot in the core hours, every day of the week and every week of the year. Therefore, a crematorium is likely be operating above capacity, or over its Quantitative Standard, if running at more than 80% of its core capacity. Therefore 80% is generally referred to as a crematorium's 'Practical Capacity', and above this figure the crematorium may be regarded as over trading.

²³ APP/C3430/W/15/3039163. Proof of Evidence of Alan Lathbury (Dignity)

2.7 This Quantitative Standard should apply both throughout the year and also in "peak months".²⁴

- 9.30 In the Camborne Appeal Decision²⁵ [CD 12.7], the Inspector Mike Robins stated:
- 9.31 23. Penmount is identified as having a capacity for 4,000 cremations per year. Although annual numbers vary it has carried out approximately 2,500 cremations per annum, with more prior to the opening of the Bodmin Crematorium in 1898. This would suggest there is significant additional capacity to deal with future demographic changes. However, I do not consider that it is entirely realistic to suggest that every available time slot, especially those in the early mornings or late afternoon, could or would be utilised and consequently the practical capacity of the crematorium would be less than the Council's theoretical figure.

24. However, even when considering the preferred core time periods it is apparent that approximately 75% of time slots on average across both chapels are used. This therefore suggest that there would be the potential for Penmount to take increased numbers of cremations.

27. Both parties have projected an increase in the number of cremations as a result of demographic change resulting in excess of 3,000 cremations per year at Penmount. Such figures would remain within theoretical capacity, however, they would significantly increase the use of preferred core times, resulting in pressure on service delivery and potentially delays in achieving appropriate and timely cremations, I therefore turn to qualitative matters.

9.32 In the West Grinstead Appeal decision²⁶ [CD 12.15], the Inspector John Woolcock stated:

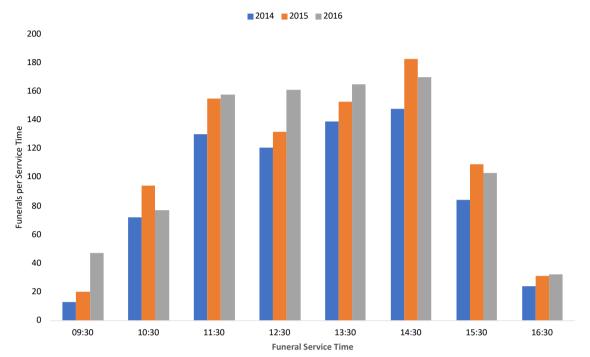
²⁶ Appeal Ref: APP/Z3825/A/14/2216102 Land adjacent to The Orchard Restaurant, Cowfold Road, West Grinstead RH13 8LU

²⁴ APP/C3430/W/15/3039129. Rebuttal Evidence. Ian McArdle (Westerleigh Group)

²⁵ APP/D0840/A/09/2098108 Land at Race Farm, Puggis Hill, Treswithian, Camborne, Cornwall

- 9.33 41. It is also difficult to determine the current capacities of existing crematoria. This in part is dependent upon how the facility is operated. What are considered to be core hour times or slots for services can depend upon the pricing structure, where cheaper slots are made available at times of reduced demand. Furthermore, the level of fees currently charged by operators might be influenced by many factors, and by itself does not throw much light on the supply/demand question. I find no convincing evidence on this basis of an existing capacity shortfall of any significance.
- 9.34 In stating that "what are considered to be core hour times or slots for services can depend upon the pricing structure" the Inspector is mistaken, although this may have reflected the limited evidence before him.
- 9.35 Actual service times may vary between crematoria, particularly where there is more than one chapel, but preference for core service times is evident across UK crematoria and does not vary with the season: they are the times most commonly booked for funeral services.
- 9.36 Of course, a small minority of people may deliberately choose a non-core service time, perhaps influenced by a cost saving or other personal reasons. Where crematoria are 'overtrading' and working at 80% or more of their core capacity, non-core times may be the only option unless families are prepared to face extended delays until a core time is available.
- 9.37 Crematoria booking diaries are not generally in the public domain and in the few examples where they are available on the crematorium's web site, they normally include only current bookings and those for the next three to four weeks. However, the reality of preferred core times is evidenced in the examples provided below.
- 9.38 The chart below illustrates the preference for core times over the three year period 2014 to 2016 at Fenland Crematorium. This is a single chapel crematorium opened in 2010 and the data relating to funeral service times booked were included in

Dignity's planning application 17/00969/FUL for a new crematorium near Huntingdon.



Funeral Times Used at Fenland Crematorium

9.39 The table below further illustrates these 2,521 funeral service times, with the core times highlighted:

Time	N	umber	of servi	ces	Per	e of serv	/ices	
Time	2014	2015	2016	Totals	2014	2015	2016	Totals
09:30	13	20	47	80	2%	2%	5%	3%
10:30	72	94	77	243	10%	11%	8%	10%
11:30	130	155	158	443	18%	18%	17%	18%
12:30	121	132	161	414	17%	15%	18%	16%
13:30	139	153	165	457	19%	17%	18%	18%
14:30	148	183	170	501	20%	21%	19%	20%
15:30	84	109	103	296	11%	12%	11%	12%
16:30	24	31	32	87	3%	4%	4%	3%

Figure 46 : Funeral service times booked at Fenland Crematorium 2014 to 2016

9.39 The Fenland Crematorium undertook 735, 878 and 910 cremations respectively in the years concerned. With six core slots available and an average of between only

Figure 45: Funeral times used at Fenland Crematorium 2014 to 2016

three and four funerals per day, 94% of funerals could easily be accommodated within the availability of core slots. The Fenland Crematorium is trading well within its practical/core capacity, accordingly the information above illustrates clearly what preferences are apparent when capacity constraints do not unduly limit choice. The picture plainly emerging is a preference for slots commencing between 10:30 and 3:30, reflecting my own long experience in the field.

9.40 In contrast, the table below similarly tabulates the funeral service times at the very busy twin chapel Chilterns Crematorium between 2nd January and 31st March 2018 inclusive, with the core times highlighted

	Hampdei	า		Milton	Funerals 5 0.9%			
Time	Fun	erals	Time	Fun	erals			
08:00	1	0.2%	08:30	5	0.9%			
08:45	5	0.9%	09:15	13	2.4%			
09:30	32	5.5%	10:00	45	8.2%			
10:15	55	9.4%	10:45	58	10.6%			
11:00	61	10.4%	11:30	64	11.7%			
11:45	62	10.6%	12:15	64	11.7%			
12:30	64	10.9%	13:00	61	11.1%			
13:15	60	10.2%	13:45	57	10.4%			
14:00	63	10.8%	14:30	58	10.6%			
14:45	62	10.6%	15:15	55	10.0%			
15:30	60	10.2%	16:00	38	6.9%			
16:15	57	9.7%	16:45	29	5.3%			
17:00	3	0.5%	17:30	2	0.4%			
17:45	1	0.2%						

Figure 47: Funeral services times booked at the Chilterns Crematorium January to March 2018

9.41 In 2018, the Chilterns undertook 3,840 cremations making it the busiest in the whole of the UK. During the three months January to March that year, there were a total of 1,135 funerals.

- 9.42 75% of those funerals occurred in a core slot.
- 9.43 An additional 17% of those funerals occurred in a 'shoulder' slot immediately outside of the core period. Only 8% of funerals occurred outside of core and 'shoulder' times.
- 9.44 The evidence from the Chilterns Crematorium strongly supports the general preference for funerals at core times of the day as I have identified them. It also supports the argument that if core slots are not available due to the crematorium being very busy and the true "core" slots being taken up first, some people end up using the 'shoulder' slots closest to the core slots (others electing to wait longer until a core slot is available). But the lower usage of the "shoulder" slots by comparison with the true "core" slots confirms their second preference / non-core status. Only a small minority choose an early morning or late afternoon slot. The booking diary shows the hallmarks of a crematorium that is operating well above 80% of its core capacity in a peak month. This is in strong contrast to the situation at a crematorium like Fenland, operating within 80% of its core capacity in a peak month.
- 9.45 The booking diary of the Surrey and Sussex Crematorium is not available in the public domain, but I strongly suspect that it would show a similar pattern to that of the Chilterns, particularly during periods of peak demand, due to the capacity calculations illustrated within the next section of this proof of evidence.
- 9.46 The chart below illustrates preference for core funeral service times at Honor Oak Crematorium during 2019. Note that this crematorium allocates four 15-minute slots between 09:00 and 10:00 to undertake public health and hospital contract funerals, which normally do not have a full funeral service, and offers additional early and late slots for contracted direct cremations. These times have been omitted and the chart represents 'standard' funerals where people were free to choose the time of the funeral service. The picture that emerges is consistent with the analysis presented above based on data from Fenland and the Chilterns.

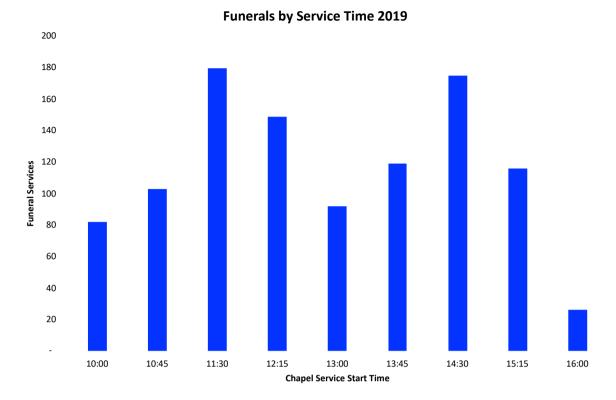


Figure 48: Funeral service times booked at Honor Oak Crematorium in 2019

9.47 Funeral service interval and funeral service duration

- 9.48 Crematoria may have a single chapel or two, or even three chapels. They also vary in the length of interval between services, the service duration offered and whether funeral services may take place on weekends.
- 9.49 The funeral service **interval** is distinct from, and longer than, the funeral service **duration**. The funeral service interval allows for the time taken by mourners to enter and leave the chapel. It also enables the crematorium staff to prepare the chapel for the next service. As a generalisation, crematoria allow five minutes for the entry of mourners and a further five minutes for their exit. Thus, a service interval of thirty minutes is only sufficient for a funeral service duration of twenty minutes.
- 9.50 The length of funeral service interval offered at UK crematoria is now generally longer than was commonly offered in the past, partly as a result of the guidance provided by the Institute of Cemetery and Crematorium Management (ICCM).
- 9.51 The ICCM's 'Charter for the Bereaved' (2014 edition) [CD 11.6] sets minimum standards and targets to achieve.
- 9.52 *"Charter members should increase the minimum time allocated for funeral services to 40 or 45 minutes wherever possible.*

The burial or cremation ceremony should be considered a highly individual and important occasion. Each funeral should ideally arrive and depart without seeing other funerals; neither should they be delayed by the late arrival of other funerals. To help achieve this standard, a minimum service time of 40 or 45 minutes ... should be an objective.' 9.52 The Cremation Society of Great Britain undertake an annual survey of crematoria, including service interval times. The latest data is tabulated below and illustrates the significant growth between 2012 and 2019 in the availability of longer funeral service intervals, particularly 45 minutes and 60 minutes:

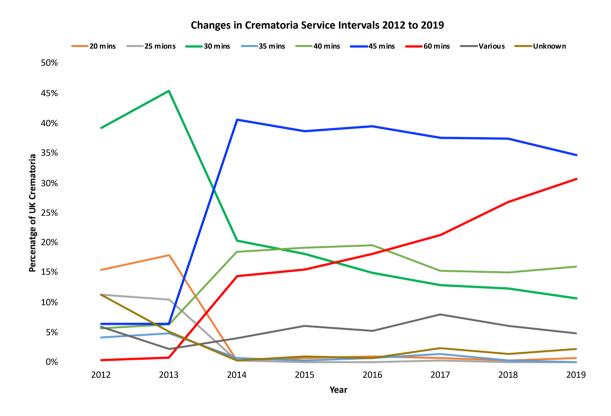


Figure 49: Changes in crematoria funeral service interval times 2012 to 2019

9.53 It is understood from a local Funeral Director that the service interval at the Surrey and Sussex Crematorium was increased from 30 minutes to 45 minutes within the last ten years, in line with the national trend.

9.54 The table below illustrates the services times commonly available at crematoria with a single chapel, reflecting different lengths of service interval offered. The core service times are highlighted in each case.

		Interval Betw	veen Funerals	
Comilao	30 Mins	40 Mins	45 Mins	60 Mins
Service		Funeral St	tart Times	
		Single	Chapel	
1	09:00	09:20	09:00	09:30
2	09:30	10:00	09:45	10:30
3	10:00	10:40	10:30	11:30
4	10:30	11:20	11:15	12:30
5	11:00	12:00	12:00	13:30
6	11:30	12:40	12:45	14:30
7	12:00	13:20	13:30	15:30
8	12:30	14:00	14:15	16:30
9	13:00	14:40	15:00	
10	13:30	15:20	15:45	
11	14:00	16:00	16:30	
12	14:30	16:40		
13	15:00			
14	15:30			
15	16:00			
16	16:30			
		Per	Day	
Total slots	16	12	11	8
Core slots	11	8	7	6
		Per N	lonth	
Total slots	336	252	231	168
Core slots	231	168	147	126
		Per	Year	
Total slots	4,032	3,024	2,772	2,016
Core slots	2,772	2,016	1,764	1,512

Figure 50: Technical (Total) and Practical (Core) Capacity at a single chapel crematorium

9.55 The table below illustrates the services times commonly available at crematoria with two chapels, again reflecting different lengths of service interval offered and the core service times:

			In	terval Betw	veen Funera	ls				
Service	30 N	/lins	40 N	Ains	45 N	/lins	60 N	Vins		
Service	Funeral Start Times									
	Chapel 1	Chapel 2	Chapel 1	Chapel 2	Chapel 1	Chapel 2	Chapel 1	Chapel 2		
1	09:00	09:15	09:00	09:20	09:00	09:15	09:00	09:30		
2	09:30	09:45	09:40	10:00	09:45	10:00	10:00	10:30		
3	10:00	10:15	10:20	10:40	10:30	10:45	11:00	11:30		
4	10:30	10:45	11:00	11:20	11:15	11:30	12:00	12:30		
5	11:00	11:15	11:40	12:00	12:00	12:15	13:00	13:30		
6	11:30	11:45	12:20	12:40	12:45	13:00	14:00	14:30		
7	12:00	12:15	13:00	13:20	13:30	13:45	15:00	15:30		
8	12:30	12:45	13:40	14:00	14:15	14:30	16:00			
9	13:00	13:15	14:20	14:40	15:00	15:15				
10	13:30	13:45	15:00	15:20	15:45	16:00				
11	14:00	14:15	15:40	16:00						
12	14:30	14:45								
13	15:00	15:15								
14	15:30	15:45								
15	16:00	16:15								
				Per	Day					
Total slots	15	15	11	11	10	10	8	7		
Core slots	11	10	7	8	7	7	5	6		
				Per	Year					
Total slots	3,780	3,780	2,772	2,772	2,520	2,520	2,016	1,764		
Core slots	2,772	2,520	1,764	2,016	1,764	1,764	1,260	1,512		
Total slots	7,5	60	5,5	544	5,0	940	3,7	780		
Core slots	5,2	.92	3,7	/80	3,5	28	2,7	72		

Figure 51: Technical (Total) and Practical (Core) Capacity at twin chapel crematoria

- 9.56 The tables above illustrate the link between funeral service interval and both technical and core capacity. It is very clear that the greatest technical capacity is achieved through offering the shortest funeral service interval. However, this has direct consequences upon the qualitative experience of users of the crematorium, as discussed in the next section of this report.
- 9.57 Depending upon the number of chapels, numbers of services offered each day and service interval times, the 'practical capacity' or 'core capacity' of crematoria can be seen to range from only 68% to 75% of 'technical capacity'.
- 9.58 Some crematoria offer less services on a Friday. Some crematoria offer their crematorium chapel(s) for use for funerals associated with burials in a cemetery sharing the same site, particularly if there is no separate cemetery chapel.
- 9.59 Some crematoria have a gap in funeral services in the middle of each day, which has a practical benefit in overcoming the problem of services that extend beyond their allocated time. This was my experience at Wrexham Crematorium, where if funerals overran their slot during the morning, the midday gap in services enabled the first afternoon funeral to start on time. It is of note that Surrey and Sussex Crematorium has no such break in the middle of the day, no doubt consistent with Dignity's business model for the facility.
- 9.60 All of these factors reduce both the 'technical' and 'core' capacity of the crematorium concerned.
- 9.61 In its evidence for the Essington appeals [CD 11.18], Dignity stated the following on the topic of service intervals:

6.28 Dignity firmly believes that a minimum of 1 hour service slots (with an overall minimum chapel time of 45 minutes) is needed to provide a dignified cremation service and fully support the needs of the bereaved. Indeed, in my experience, the importance of 1 hour service slots should not be understated in providing bereaved

families with the time and space needed to ensure a dignified and respectful service for their loved ones. The most frequent criticism of crematoria from both users and funeral directors is the feeling of a 'conveyor belt' type of operation. The sight of a previous funeral departing a site as the next service arrives is an unwelcome (and potentially distressing) start to any funeral service.

6.29 At a practical level, it can also give rise to stress on parking provision and in the case of a two chapel site, as at Bushbury, lead to people attending the wrong service if two funeral services are overlapping in separate chapels.

6.30 Unlike Bushbury, the Appeal Scheme would be a single chapel crematorium. This, in combination with a longer (1 hour) service time, would avoid any issues associated with having two cremation services on site at the same time.²⁷

9.62 Dignity offer 45 minute service slots at the Surrey and Sussex Crematorium, thus not achieving the standard referenced by Dignity as "needed to provide a dignified cremation service and fully support the needs of the bereaved" at the Essington appeal. The reason for this is that this crematorium is working at too high capacity levels and, whilst a change to 60 minute service intervals would improve the quality of service offered, it would lead to further increases in delays between death and funeral.

²⁷APP/C3430/W/15/3039163. Proof of Evidence of Alan Lathbury December 2018

9.63 Seasonal fluctuations in demand

- 9.64 In the Halstead Appeal Decision²⁸ [CD 12.10], the Inspector David Richards stated:
- 9.65 23. A number of objectors have questioned the Appellant's evidence of need, referring to the statements by existing operators of crematoria at Tunbridge Wells, Medway and Eltham that they are currently operating below capacity. While it may be that over a period of a year, there are untaken slots which are theoretically available, this doesn't take account of seasonal fluctuations in mortality which affect levels of demand.
- 9.66 The chart below illustrates clear seasonal fluctuations in mortality by using ONS data for monthly deaths registered in England over the five year period 2015 to 2019:

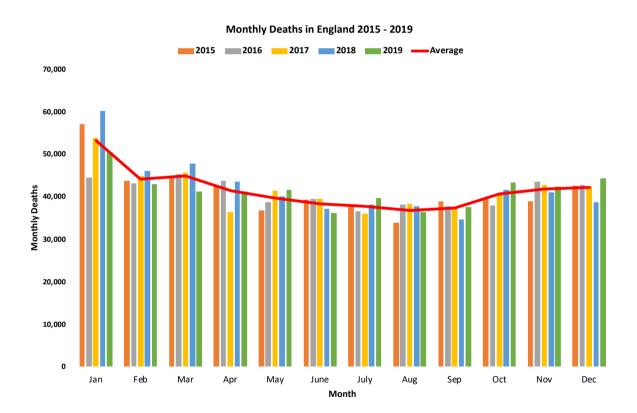


Figure 52: Average monthly deaths in England and Wales 2015 to 2019

²⁸ APP/G2245/A/13/2210128 Land south of Orchard Barn, London Road, Halstead, TN14 7AD

- 9.67 During the five year period 2015 to 2019, the average number of monthly deaths was 41,498. The lowest number of average monthly deaths, 36,855, occurred in September. The highest number of average monthly deaths, 52,131, occurred in January. On average during this five year period, peak monthly deaths were 20.4% more than average.
- 9.68 The ONS data relate to the month in which each death was registered, rather than the month in which it occurred. This may lead to the numbers of deaths registered in some months being subject to the impact of Public Holidays upon the availability of the Registration Service in the previous month. However, this in no way detracts from the key point of peak monthly demand as it is a statutory requirement for death to be registered before cremation may occur. It also underscores why peak demand at crematoria (and core slot availability issues at the busier facilities) occurs in the first months of the year.
- 9.69 It is also important to note that every death occurring or being registered in the later part of one particular month is unlikely to be cremated during the same month, due to the time required to meet legal and practical requirements necessary when arranging a cremation. This does not undermine the validity of calculating cremations in the peak month of demand.
- 9.70 Recovering a Planning Inquiry in South Staffordshire involving two proposed new crematoria, the Secretary of State endorsed (at paragraph 11 of his decision letter) [CD 12.4] the Inspector's views that practical capacity must be measured in the peak month of demand:
- 9.71 215. All parties agree that Bushbury Crematorium in north Wolverhampton, on any assessment, is under significant pressure. The parties agree that the best measure for assessing whether a crematorium is meeting a quantitative standard is its practical capacity in a peak month. In 2015 Bushbury operated at about 115% of practical capacity in a peak month. The Council accepts that operating above 80% of

practical capacity places a crematorium under pressure to offer a cremation service that meets an acceptable quantitative standard.²⁹

- 9.72 I now explain the numerical calculations which lie behind these conclusions of the Inspector (endorsed by the Secretary of State), which can be derived from the evidence before that inquiry. In summary (and reflecting also the methodology which I apply to the present case in section 10 below), in 2015, 2,645 funeral services took place at the twin chapel Bushbury Crematorium. Its practical capacity was 12 core services per day, 3,024 per year, giving a practical capacity utilisation of 87.5%. And, taking into account that the peak month had 11% of annual deaths, the practical capacity of Bushbury Crematorium in the peak month of demand in 2015 was 115.5%.
- 9.73 In his report to the Secretary of State for Communities and Local Government [CD 12.4], the Inspector at the Essington Appeal Decision, John Braithwaite also expanded upon the impact upon the qualitative experience of bereaved people due to a crematorium operating above its practical capacity during the peak month, stating the following in the section of his report which summarised Dignity's closing submissions:
- 9.74 126. It is important to note that the need is not simply demonstrated by a blackletter calculation which demonstrates that Bushbury is trading at over 80% of its practical capacity. Rather, the need is also demonstrated by the unsatisfactory (to put it mildly) qualitative situation at Bushbury, which demonstrates that qualitative issues are a manifestation of quantitative deficiencies. The existing problems at that crematorium have been a common feature of both Dignity and Westerleigh's evidence. Bushbury was developed in the 1950's to cater for a primarily Christian population. It was designed as a single chapel scheme with a second chapel being grafted on in 1970. Given that slot times are 45 minutes it is likely that there will often be four funeral parties on site at any given time. This results in a conveyor-belt

²⁹ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire

experience for mourners. This is clearly deficient given the sensitivities which surround the grieving process.

127. The lack of adequate parking at Bushbury further increases the qualitative deficiencies on site. As Mr Lathbury stated in evidence the constraints at the site means that this isn't simply an operational issue which can be dealt with.

128. Further, the overtrading has led to unacceptable delays between the date of death and date of cremation. Analysis undertaken by Dignity (and unchallenged by any party to the inquiry) shows that average waiting times between date of death and date of cremation are materially longer than either Telford or other crematoria in the area. This is a very clear qualitative deficiency which has resulted from the quantitative overtrading.³⁰

- 9.75 The Secretary of State's decision to overrule the Planning Inspector's recommendation, that Dignity be granted planning permission for their crematorium at Wergs and that Westerleigh's appeal against refusal of permission for their crematorium at Essington be dismissed, was subsequently quashed by a Consent Order issued on 26.3.2018 [CD 12.20]. The reasons related to a misunderstanding on the part of the Secretary of State regarding the need for both new crematoria and do not undermine the Inspector's comments about need being relating to overcapacity working of Bushbury and other crematoria. I understand, therefore, that the conclusions of the Inspector regarding need/over-trading (endorsed by the Secretary of State) to which I have referred above are unaffected by the Consent Order and may be taken into account as "material considerations" for purposes of this appeal.
- 9.76 The matter was subsequently redetermined on 31 March 2021 following a second cojoined public inquiry [CD 12.5], when both proposed new crematoria (both located in the Green Belt) were granted planning permission. The Secretary of State's decision letter included the following, based on need analysis updated from 2015:

³⁰ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire 6/11/2017

9.77 19. Overall the Secretary of State agrees there is a substantial, if different quantitative and qualitative need for both proposals (IR13.17) and that the latest evidence before him demonstrates this remains the case. He gives this significant weight. It was common ground between all the main parties that at least one new crematorium is required to relieve pressure on Bushbury and that this need amounts to very special circumstances that could outweigh the harm by reason of inappropriate development, to the Green Belt (IR13.44). For the reasons given at IR13.48-13.50, the Secretary of State agrees with the Inspector at IR13.50 that the consequences of chronic pressure at Bushbury would amount to very special circumstances, and also that taking account of the latest information on need and rebalancing, the need for both proposals (this proposal and the Essington appeal referred to in paragraph 1 above) has increased. He agrees with the Inspector that taking account of rebalancing, the need for both proposals means that very special circumstances exist to justify both appeal schemes.³¹

³¹ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire. Secretary of State's letter 31/3/2021

9.78 Monthly fluctuations in deaths

- 9.77 This proof of evidence uses ONS data on monthly deaths by usual residence of the deceased for 2016 to 2019 inclusive, for the respective local authorities lying wholly or partly within the catchment of each crematorium in the area in order to inform consideration of its capacity to cope with seasonal variations in demand.
- 9.78 The tables below illustrate the data on monthly deaths by usual residence of the deceased for 2016 to 2019 inclusive for all catchment local authorities. The month with the highest number of deaths registered is highlighted for ease of reference.

				2	016								
Local Authority	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Adur	56	55	64	71	51	54	46	57	58	45	50	59	666
Arun	224	207	202	171	175	217	169	141	167	167	183	196	2,219
Brighton and Hove	191	199	202	183	162	145	153	162	158	182	197	203	2,137
Chichester	130	114	132	119	106	100	131	100	105	118	128	132	1,415
Crawley	55	65	63	61	65	65	62	66	57	62	78	60	759
Horsham	100	119	122	112	93	117	98	101	97	88	113	102	1,262
Lewes	113	96	109	98	76	100	85	74	93	84	99	94	1,121
Mid Sussex	133	135	111	126	77	95	89	97	106	115	132	127	1,343
Mole Valley	82	65	74	98	58	86	66	68	56	70	81	77	881
Reigate & Banstead	120	128	136	110	110	105	92	95	110	107	120	90	1,323
Rother	113	116	140	115	101	95	97	86	81	101	119	107	1,271
Sevenoaks	89	85	83	88	90	74	83	89	64	84	89	84	1,002
Tandridge	78	62	71	89	66	65	56	63	60	77	60	72	819
Tonbridge and Malling	96	78	99	107	70	88	70	76	81	83	82	95	1,025
Tunbridge Wells	92	74	99	97	106	100	78	73	75	91	96	85	1,066
Wealden	138	139	157	161	132	141	125	126	144	150	171	145	1,729
Worthing	126	106	145	114	118	86	99	89	115	103	131	138	1,370
				2	017		1	1					
Local Authority	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Adur	77	58	85	57	68	58	40	56	51	56	58	81	745
Arun	262	186	206	147	173	171	148	161	166	194	203	176	2,193
Brighton and Hove	256	227	212	136	195	163	158	175	136	153	188	197	2,196
Chichester	170	126	135	130	120	122	100	104	104	122	119	132	1,484
Crawley	88	67	78	51	54	69	51	61	64	57	61	52	753
Horsham	168	101	132	101	109	101	89	99	119	98	122	103	1,342
Lewes	118	93	77	82	106	91	84	81	76	115	93	84	1,100
Mid Sussex	174	149	132	102	110	106	104	98	104	104	104	111	1,398
Mole Valley	96	81	61	73	61	84	50	71	50	77	57	80	841
Reigate & Banstead	147	133	122	99	114	115	86	116	105	108	118	130	1,393
Rother	176	125	130	98	106	118	95	92	101	121	118	112	1,392
Sevenoaks	131	81	94	85	116	80	88	80	76	86	88	80	1,085
Tandridge	103	68	81	57	74	69	42	53	62	66	95	79	849
Tonbridge and Malling	116	85	94	77	87	82	69	80	58	100	95	93	1,036
Tunbridge Wells	97	86	85	87	105	78	82	73	82	79	80	96	1,030
Wealden	190	175	142	145	122	143	139	143	151	155	132	159	1,796
Worthing	173	152	138	84	117	104	106	113	97	127	127	122	1,460

Figure 53: ONS Monthly deaths by usual residence of the deceased for 2016 & 2017

				2	018								
Local Authority	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Adur	97	65	74	57	56	28	50	58	46	53	61	50	695
Arun	306	204	204	200	154	156	165	161	144	170	203	168	2,235
Brighton and Hove	261	215	220	178	182	148	151	164	153	171	206	182	2,231
Chichester	213	126	138	138	119	108	92	99	111	110	111	107	1,472
Crawley	97	63	80	68	65	56	50	56	64	57	58	50	764
Horsham	141	100	130	126	97	111	100	88	101	104	107	99	1,304
Lewes	134	103	112	104	100	74	88	103	76	97	77	82	1,150
Mid Sussex	176	113	146	131	95	93	107	96	99	103	109	114	1,382
Mole Valley	87	77	80	71	61	56	46	49	49	95	63	71	805
Reigate & Banstead	149	132	139	120	93	88	95	102	86	98	88	95	1,285
Rother	151	125	128	117	108	72	101	97	102	118	114	92	1,325
Sevenoaks	130	101	108	102	82	86	89	90	85	100	98	73	1,144
Tandridge	89	77	80	65	59	39	59	71	50	72	78	69	808
Tonbridge and Malling	139	101	101	94	86	98	82	95	89	101	79	97	1,162
Tunbridge Wells	126	106	107	86	90	87	81	75	84	106	82	74	1,104
Wealden	201	167	191	165	164	124	140	119	130	140	137	138	1,816
Worthing	164	124	146	129	100	78	106	78	102	115	103	125	1,370
				2	019						1		
Local Authority	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Adur	70	59	57	51	56	61	68	53	55	61	55	57	703
Arun	240	175	182	172	186	163	178	166	153	184	192	158	2,149
Brighton and Hove	193	196	169	169	192	158	183	139	165	188	171	170	2,093
Chichester	159	115	97	112	134	108	105	107	119	148	127	136	1,467
Crawley	65	76	70	68	74	53	48	46	59	66	63	70	758
Horsham	136	123	111	97	116	99	113	88	102	127	95	104	1,311
Lewes	146	105	95	86	111	77	79	80	88	91	119	95	1,172
Mid Sussex	148	112	120	117	115	93	108	93	99	116	125	113	1,359
Mole Valley	77	69	72	63	71	70	63	59	65	70	63	65	807
Reigate & Banstead	166	115	114	94	112	101	94	93	88	99	108	96	1,280
Rother	146	101	133	106	134	103	98	95	82	130	125	118	1,371
Sevenoaks	107	109	98	95	90	89	87	113	115	121	113	144	1,281
Tandridge	93	74	78	80	51	52	55	67	66	80	78	78	852
Tonbridge and Malling	119	99	96	90	76	69	82	85	78	95	78	95	1,062
Tunbridge Wells	108	104	90	89	95	79	68	81	81	83	99	97	1,074
Wealden	168	157	146	151	149	129	134	135	151	183	158	150	1,811
Worthing	120	116	117	95	111	88	122	98	106	91	119	129	1,312

Figure 54: ONS Monthly deaths by usual residence of the deceased for 2018 & 2019

Local Authority	2016	2017	2018	2019
Adur	10.7%	11.4%	14.0%	10.0%
Arun	10.1%	11.9%	13.7%	11.2%
Brighton and Hove	9.5%	11.7%	11.7%	9.4%
Chichester	9.3%	11.5%	14.5%	10.8%
Crawley	10.3%	11.7%	12.7%	10.0%
Horsham	9.7%	12.5%	10.8%	10.4%
Lewes	10.1%	10.7%	11.7%	12.5%
Mid Sussex	10.1%	12.4%	12.7%	10.9%
Reigate & Banstead	10.3%	10.6%	11.6%	13.0%
Rother	11.0%	12.6%	11.4%	10.6%
Sevenoaks	9.0%	12.1%	11.4%	11.2%
Tandridge	10.9%	12.1%	11.0%	10.9%
Tonbridge and Malling	10.4%	11.2%	12.0%	11.2%
Tunbridge Wells	9.9%	10.2%	11.4%	10.1%
Wealden	9.9%	10.6%	11.1%	10.1%
Worthing	10.6%	11.8%	12.0%	9.8%

Figure 55: Proportions of annual deaths occurring in peak months 2016 to 2019

9.79 Direct cremation

- 9.80 'Direct cremation' is a simple, low-cost funeral option whereby the deceased is brought to a crematorium and cremated without any ceremony. In the past, this was referred to as a 'no service' cremation, but there was usually no associated reduced fee. Both Funeral Director and crematorium charge lower fees for direct cremation than standard funerals.
- 9.81 Where available, direct cremation is usually offered by crematoria as early morning or late afternoon slots: direct cremations are not allocated standard or core slots. Direct cremations do not affect the technical capacity or the core capacity of a crematorium to hold standard cremation funeral services.
- 9.82 Data published by the Cremation Society of Great Britain indicates that in 2018, 3.1%
 of UK cremations were direct cremations and that this figure rose to 5.3% in 2019.
 Not all crematoria report direct cremations separately on their annual survey return.
- 9.83 The table below illustrates numbers, where published, and the proportions of direct cremations during 2019:

Crematorium	Total cremations	Direct Cremations		
Brighton The Downs	1,214			
Brighton Woodvale	1,821	288	15.8%	
Kent & Sussex	2,288	337	14.7%	
Surrey & Sussex	2,930	89	3.0%	
Wealden	370	100	27.0%	
Worthing	3,489	1,048	30.0%	

Figure 56: Direct cremations in 2019

9.84 In the next section of this proof of evidence, direct cremations (where reported) are excluded from the total numbers of cremations in the calculations of core capacity. This procedure enhances the robustness of the results.

10. Quantitative need for Turners Hill Crematorium: assessing current capacity

- 10.1 For each crematorium, this proof of evidence provides the service times available, using information from the relevant web site and the price list of each crematorium concerned. Core service times are as defined earlier in this proof, i.e. those commencing between 10.30am and 3.30pm.
- 10.2 The table below indicates the meaning of terms and the calculation methods used in the capacity tables for each crematorium:

Combined annual deaths in catchment area						
Average deaths per month	Data relating to deaths in the local authorities lying wholly or partially					
Deaths in peak month	within the drive-time catchment of the crematorium					
Percentage of annual deaths occurring in peak month						
Annual cremations, minus direct cremations	Number of annual cremations with a funeral service					
Total slots available	Total number of funeral service slots available per year					
Level of technical capacity	Annual cremations, minus direct cremations divided by total slots available					
Total core slots available	Total number of funeral service slots commencing within core times (10.30-3.30)					
Level of practical (core) capacity	Annual cremations, minus direct cremations divided by core slots					
Average monthly core slots available						
Average monthly cremations						
Calculated peak month cremations	Annual cremations minus direct cremations multiplied by the % of deaths in the peak month					
Level of practical (core) capacity	Calculated peak month cremations					
in peak month	divided by average monthly core slots					

Figure 57: Derivation of data used in capacity tables

10.3 Capacity at Surrey and Sussex Crematorium

10.4 The two tables below (based on information publicly available on the Cremation Society website) illustrate the national ranking of the Surrey and Sussex Crematorium in terms of numbers of cremations (ie, busy-ness) and cremation charges.

Year	2016	2017	2018	2019
Operational UK crematoria	281	289	299	307
UK ranking by cremations of Surrey & Sussex	12 th	10 th	11 th	11 th
Total UK cremations	459,693	468,702	481,308	472,302
Average cremations per crematorium	1,636	1,622	1,610	1,538
Cremations at Surrey & Sussex	3,017	3,065	3,027	2,930
Cremations at Surrey & Sussex	1,381	1,443	1,417	1,392
compared with UK average	184.4%	189.0%	188.0%	190.5%

Figure 58: UK ranking by cremation volumes of Surrey and Sussex Crematorium 2016 to 2019

Year	2016	2017	2018	2019
Average UK crematorium charge	£720.43	£744.93	£783.18	£810.23
UK ranking by charge of Surrey & Sussex	1 st equal	1 st equal	1 st equal	1 st equal
Charge at Surrey & Sussex	£956.00	£999.00	£ 1,070.00	£ 1,070.00
Charge at Surrey & Sussex	£235.57	£254.07	£286.82	£259.77
compared with UK average charge	132.7%	134.1%	136.6%	132.1%

Figure 59: UK ranking by cremation charge of Surrey and Sussex Crematorium 2016 to 2019

10.5 The two tables below compare numbers of cremations and cremation charges at the Surrey and Sussex Crematorium with those at the other crematoria featured in this section of this proof of evidence.

Year	2016	2017	2018	2019
Cremations at Surrey & Sussex	3,017	3,065	3,027	2,930
Cremations at Woodvale	2,018	1,967	2,046	1,821
Cremations at The Downs	1,285	1,127	1,174	1,214
Cremations at Kent & Sussex	2,346	2,414	2,572	2,288
Average	2,167	2,143	2,205	2,063
Cremations at Surrey & Sussex	851	922	822	867
compared with average	139.3%	143.0%	137.3%	142.0%

Figure 60: Comparison of cremation volumes

Year	2016	2017	2018	2019
Charge at Surrey & Sussex	£956.00	£999.00	£ 1,070.00	£ 1,070.00
Charge at Woodvale	£620.00	£620.00	£633.00	£633.00
Charge at The Downs	£584.50	£600.00	£633.00	£633.00
Charge at Kent & Sussex	£706.00	£706.00	£726.00	£747.00
Average crematorium charge	£716.63	£731.25	£765.50	£770.75
Charge at Surrey & Sussex	£239.38	£267.75	£304.50	£299.25
compared with average charge	133.4%	136.6%	139.8%	138.8%

Figure 61: Comparison of crematorium charges

- 10.6 It is quite evident from these four tables that, whether compared with crematoria nationally or locally, the Surrey and Sussex Crematorium is very busy and very expensive.
- 10.7 These factors indicate that there is a lack of competition within its large catchment area, resulting in a lack of choice for bereaved people, who must pay significantly more than others to use a crematorium that is one of the busiest in the UK.

10.8 The table below compares the ranking of the Surrey and Sussex with that of Bushbury Crematorium at Wolverhampton, which featured in the Essington Appeals:

281 459,693	289	299	307
459,693	100 700		
,	468,702	481,308	472,302
1,636	1,622	1,610	1,538
3,017	3,065	3,027	2,930
2,570	2,730	2,829	2,475
12th	10th	11th	11th
25th	18th	16th	21st
	3,017 2,570 12th 25th	3,017 3,065 2,570 2,730 12th 10th 25th 18th	3,017 3,065 3,027 2,570 2,730 2,829 12th 10th 11th

Figure 62: Comparison of cremation numbers at Surrey & Sussex and Bushbury

- 10.9 On average, during the four years 2016 to 2019 Bushbury carried out 88% of the number of cremations undertaken at the Surrey and Sussex.
- 10.10 Both crematoria have two chapels and on average, (excluding direct cremations):
 - Bushbury hosted 1,324 cremation funerals per chapel, equating to an average of 5.25 funerals per chapel per day.
 - Sussex and Sussex hosted 1,494 cremation funerals per chapel, equating to an average of 5.93 funerals per chapel per day
- 10.11 The Essington appeals found substantial need for new capacity as a consequence of over-trading at Bushbury Crematorium (a less busy facility than Surrey and Sussex), ultimately justifying consent for two new crematoria, both located in the Green Belt.
- 10.12 In addition, the first Essington Inspector stated, "need is not simply demonstrated by a blackletter calculation ... qualitative issues are a manifestation of quantitative deficiencies...Given that slot times are 45 minutes it is likely that there will often be four funeral parties on site at any given time. This results in a conveyor-belt experience for mourners. This is clearly deficient given the sensitivities which surround the grieving process."³²

³² Ibid para 216

10.13 The table below illustrates the service times available at the Surrey and Sussex Crematorium. These are based upon my understanding of Dignity's published price list for the crematorium, illustrated in my separate Appendix 3; evidence from the survey of obituaries; and my classification of core service times as discussed in section 9 of this proof of evidence.

	Monday	to Friday	
	Funeral S	tart Times	Кеу
	Memorial	St Richards	
	08:15	08:15	Unattended direct cremation
	08:20	08:20	Unattended direct cremation
	08:30	08:30	Unattended direct cremation
	08:40	08:40	Unattended direct cremation
	09:00	09:00	Attended direct cremation
	09:30		Reduced fee
	10:15	09:45	Non-core time
	11:00	10:30	Core time
	11:45	11:15	Core time
	12:30	12:00	Core time
	13:15	12:45	Core time
	14:00	13:30	Core time
	14:45	14:15	Core time
	15:30	15:00	Core time
	16:15	15:45	Non-core time
		16:30	Non-core time
		Daily	
Total slots	10	10	20
Core slots	7	7	14
		Monthly	1
Total slots	210	210	420
Core slots	147	147	294
		Annual	
Total slots	2,520	2,520	5,040
Core slots	1,764	1,764	3,528

Figure 63: Funeral service times at the Surrey and Sussex Crematorium

- 10.14 The Surrey and Sussex Crematorium has two chapels: the smaller Memorial Chapel with a seating capacity for 54 mourners and the larger St Richards Chapel with seating capacity for 134 mourners. It offers early morning slots for 'direct cremations' and also potential weekend funerals, subject to staff availability. However, neither 'direct cremations' nor weekend funerals occupy core slots.
- 10.15 Excluding the direct cremation slots, this crematorium has 5,040 weekday funeral slots and 3,528 core funeral service times available per year.
- 10.16 The table below illustrates the levels of technical, practical and peak month practical capacity at the Surrey and Sussex Crematorium. These figures assume a 50% share of total funerals in each chapel.

		A			
Surrey & Sussex Crematorium		2017	2018	2019	Averages
Combined annual deaths in catchment area	10,239	10,557	10,458	10,631	10,471
Average deaths per month	853	880	872	886	873
Deaths in peak month	943	1,215	1,204	1,106	1,117
Percentage of annual deaths occurring in peak month	9.2%	11.5%	11.5%	10.4%	10.7%
Annual cremations, minus direct cremations		3,065	3,027	2,841	2,988
Total slots available			5,040		
Level of technical capacity	60%	61%	60%	56%	59%
Total core slots available			3,528		
Level of practical (core) capacity	86%	87%	86%	81%	85%
Average monthly core slots available	294				
Average monthly cremations	251	255	252	237	249
Calculated peak month cremations		353	348	296	318
Level of practical (core) capacity in peak month		120%	119%	101%	108%

Figure 64: Capacity levels at Surrey & Sussex Crematorium 2016 to 2019

10.17 These levels of practical capacity in the peak month of demand all significantly exceed the 80% figure accepted at the Essington Appeal [CD 12.4].³³

³³ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire para. 215

- 10.18 Each chapel at the Surrey and Sussex Crematorium is selected for a funeral not only due to the service time available on any given day, but also upon the size and character of each chapel and the capacity it offers for the number of mourners attending.
- 10.19 The sample of obituaries featured in this reported indicated that at the Surrey and Sussex 68% of funerals used the smaller Memorial Chapel. This reflects the general predominance of funerals, which are attended by 50 or less mourners.
- 10.20 The table below illustrates the significant impact upon the level of peak month capacity if one chapel accommodates 60%, rather than 50%, of total funerals, conservative proportions compared with those noted in the obituaries.

Surroy & Sussoy Cromotorium		Year				
Surrey & Sussex Crematorium	2016	2017	2018	2019		
Combined annual deaths in catchment area	10,239	10,557	10,458	10,631	10,471	
Average deaths per month	853	880	872	886	873	
Deaths in peak month	943	1,215	1,204	1,106	1,117	
Percentage of annual deaths occurring in peak month	9.2%	11.5%	11.5%	10.4%	10.7%	
Adjusted annual cremations, minus direct cremations	1,810	1,839	1,816	1,705	1,793	
Total slots available			2,520			
Level of technical capacity	72%	73%	72%	68%	71%	
Total core slots available			1,764			
Level of practical (core) capacity	103%	104%	103%	97%	102%	
Average monthly core slots available			147			
Average monthly cremations	151	153	151	142	149	
Calculated peak month cremations	167	212	209	177	191	
Level of practical (core) capacity in peak month	113%	144%	142%	121%	130%	

Figure 65: Peak month capacity if one chapel hosts 60% of funerals

10.21 The table below illustrates actual deaths in 2019 and the ONS 2018-based projections for deaths in 2043 in the local authorities wholly or partly within the catchment of the Surrey and Sussex Crematorium:

• ···	Dea	ths	Projected Change		
Area	2019	2043	2020 t	o 2043	
Crawley	758	929	171	22.6%	
Horsham	1,311	2,021	710	54.2%	
Lewes	1,172	1,496	324	27.6%	
Mid Sussex	1,359	1,924	565	41.6%	
Mole Valley	807	1,086	279	34.6%	
Reigate & Banstead	1,280	1,797	517	40.4%	
Sevenoaks	1,281	1,370	89	6.9%	
Tandridge	852	1,109	257	30.2%	
Wealden	1,811	2,447	636	35.1%	
Totals	10,631	14,179	3,548	33.4%	

Figure 66: ONS 2018-based population projections for deaths

10.22 The table below applies the average projected 33.4% increase in catchment deaths to the number of cremations in 2019 at the Surrey and Sussex Crematorium in order to illustrate its potential capacity levels in 2043:

Surrey & Sussex Crematorium					
Combined annual deaths in catchment area	14,179				
Average deaths per month	1,182				
Deaths in peak month	1,475				
Percentage of annual deaths occurring in peak month	10.4%				
Annual cremations, minus direct cremations	3,789				
Total slots available	5,040				
Level of technical capacity	75%				
Total core slots available	3,528				
Level of practical (core) capacity	107%				
Average monthly core slots available	294				
Average monthly cremations	316				
Calculated peak month cremations	394				
Level of practical (core) capacity in peak month	134%				

Figure 67: Projected capacity levels in 2043

10.23 Dignity's alternative capacity figures

- 10.24 On 29th December 2020, Clyde & Co LLP, on behalf of Dignity, wrote a letter to Mid Sussex District Council (MSDC) objecting to the planning application for the Turners Hill Crematorium (DM/20/2877).
- 10.25 One of the grounds of the objection related to the capacity calculations for the Surrey and Sussex Crematorium that I had included within my Crematorium Need Assessment, which supported the planning application.
- 10.26 On 15th March 2021, Clyde & Co LLP, on behalf of Dignity Funerals Limited, wrote a letter to the Planning Inspectorate objecting to the proposed Turners Hill Crematorium.
- 10.27 The second letter of objection includes, as its Appendix 2, two tables listing available times in each of the two chapels at the Surrey and Sussex Crematorium and classifying them as either 'Attended Off Peak' or 'Attended Peak'. The tables are included as evidence that support para. 3.21 of the letter, which seeks to address the '*inaccurate assumptions*' in my Crematorium Need Assessment relating to the classification of service times at the Surrey and Sussex Crematorium.
- 10.28 My '*inaccurate assumptions*' are based upon my understanding of Dignity's published price list for the crematorium; evidence from the survey of obituaries; and my classification of core service times as discussed in section 9 of this proof of evidence.

10.29	The table	below	incorporates	my	original	(PMA)	table	with	one	revised	to
	accommod	ate the	information su	uppli	ed by Dig	nity, via	Clyde	& Co.			

		PMA need r	eport		Clyde & Co				
	Monday	to Friday	Monday to Friday						
	Funeral S	tart Times	Key	Funeral S	tart Times	Кеу			
	Memorial	St Richards	Ney	Memorial St Richards		Key			
	08:15	08:15	Direct cremation	08:15	08:15	Direct cremation			
	08:20	08:20	Direct cremation	08:20	08:20	Direct cremation			
	08:30	08:30	Direct cremation	08:30	08:30	Direct cremation			
	08:40	08:40	Direct cremation	08:40	08:40	Direct cremation			
	09:00	09:00	Direct cremation	09:00	09:00	Non-core time			
	09:30		Reduced fee	09:30	09:45	Non-core time			
	10:15	09:45	Non-core time	10:15		Core time			
	11:00	10:30	Core time	11:00	10:30	Core time			
	11:45	11:15	Core time	11:45	11:15	Core time			
	12:30	12:00	Core time	12:30	12:00	Core time			
	13:15	12:45	Core time	13:15	12:45	Core time			
	14:00	13:30	Core time	14:00	13:30	Core time			
	14:45	14:15	Core time	14:45	14:15	Core time			
	15:30	15:00	Core time	15:30	15:00	Core time			
•	16:15	15:45	Non-core time		15:45	Core time			
		16:30	Non-core time	16:15	16:30	Non-core time			
	Per C	Chapel	Total	Per (Chapel	Total			
			Daily	I	1				
Total slots	10	10	20	11	11	22			
Core slots	7	7	14	8	8	16			
			Monthly						
Total slots	210	210	420	231	231	462			
Core slots	147	147	294	168	168	336			
	[]		Annual		r				
Total slots	2,520	2,520	5,040	2,772	2,772	5,544			
Core slots	1,764	1,764	3,528	2,016	2,016	4,032			

Figure 68: Comparison of funeral service times at the Surrey and Sussex Crematorium

10.30 Please note that I have removed references to 'Unattended' or 'Attended' direct cremations merely to fit the table within the page margins.

- 10.31 The effect of Dignity's own classification of service times is to increase both the technical and practical capacity at the Surrey and Sussex Crematorium by 2 slots per day. Annually, this equates to 504 more slots in total (5,544 compared with 5,040) and 504 more slots classified as core times (4,032 compared with 3,528). I refer the Inspector to, and do not here repeat, my evidence in section 9 of this proof on the reasonableness of Dignity's proposed extension of core times (and its consistency with the views of Westerleigh, or indeed Dignity as stated elsewhere).
- 10 32 The table below uses this alternative, increased capacity to assess the crematorium's practical capacity in the peak month of demand.

Summer & Sussey Commentarium		Averages			
Surrey & Sussex Crematorium	2016	2017	2018	2019	Averages
Combined annual deaths in catchment area	10,239	10,557	10,458	10,631	10,471
Average deaths per month	853	880	872	886	873
Deaths in peak month	943	1,215	1,204	1,106	1,117
Percentage of annual deaths occurring in peak month	9.2%	11.5%	11.5%	10.4%	10.7%
Annual cremations, minus direct cremations		3,065	3,027	2,841	2,988
Total slots available	5,544				
Level of technical capacity	54%	55%	55%	51%	54%
Total core slots available			4,032		
Level of practical (core) capacity	75%	76%	75%	70%	74%
Average monthly core slots available	336				
Average monthly cremations	251	255	252	237	249
Calculated peak month cremations		353	348	296	318
Level of practical (core) capacity in peak month	83%	105%	104%	88%	95%

Figure 69: Alternative capacity levels at Surrey & Sussex Crematorium 2016 to 2019

10.33 It can be seen that, even if the wider definition of capacity presented by Dignity through Clyde and Co. is applied, there is simply no disguising the fact that the Surrey and Sussex Crematorium is working significantly above 80% of its practical capacity in the peak month of demand, with consequential impacts upon both quantitative and qualitative provision.

- 10.34 It is also worth repeating that these capacity levels are achieved through operation of both chapels throughout the middle of the day (ie, without lunch-time break) at 45 minute service intervals (ie, contrary to what Dignity has accepted elsewhere is necessary to respect the reasonable expectations of the bereaved).
- 10.35 Clyde & Co's letter also disputes my examination of capacity to reflect uneven use of each of the chapels. The figures in the table above based are upon a 50% share of total funerals in each chapel and clearly demonstrate overcapacity working at the Surrey and Sussex Crematorium on that basis.
- 10 36 The table below compares my original figures for potential capacity levels in 2043 with those based upon Dignity's alternative classification of service times:

	20	43
Surrey & Sussex Crematorium	РМА	Dignity
Combined annual deaths in catchment area	14,	179
Average deaths per month	1,1	.82
Deaths in peak month	1,4	75
Percentage of annual deaths occurring in peak month	10.4%	
Annual cremations, minus direct cremations	3,789	
Total slots available	5,040 5,	
Level of technical capacity	75%	68%
Total core slots available	3,528	4,032
Level of practical (core) capacity	107%	94%
Average monthly core slots available	294	336
Average monthly cremations	316	
Calculated peak month cremations	394	
Level of practical (core) capacity in peak month	134%	117%

Figure 70: Comparison of projected capacity levels in 2043

10.37 Quantitative capacity cannot be increased at the Surrey and Sussex Crematorium without negative impacts upon its qualitative provision. Using Dignity's own classification of available funeral slots, and which of them qualify as core slots, the crematorium is currently operating at an average of 95% of practical capacity in the peak month of demand. Based upon ONS projected increases in catchment deaths by 2043, the projected capacity level of 117% is the only logical outcome without the development of additional crematorium capacity to meet the needs of the catchment population.

10.38 Impact of Turners Hill Crematorium upon Surrey and Sussex

10.39 The tables below quantify the potential benefit of new capacity at Turners Hill Crematorium upon levels of capacity working at the Surrey and Sussex Crematorium.

Surrey & Sussex Crematorium		Year					
Surrey & Sussex Crematorium		2017	2018	2019	Averages		
Combined annual deaths in catchment area	10,239	10,557	10,458	10,631	10,471		
Average deaths per month	853	880	872	886	873		
Deaths in peak month	943	1,215	1,204	1,106	1,117		
Percentage of annual deaths occurring in peak month	9.2%	11.5%	11.5%	10.4%	10.7%		
Adjusted annual cremations, minus direct cremations	2,053	2,101	2,063	1,877	2,024		
Total slots available	5,040						
Level of technical capacity	41%	42%	41%	37%	40%		
Total core slots available			3,528				
Level of practical (core) capacity	58%	60%	58%	53%	57%		
Average monthly core slots available			294				
Average monthly cremations	171	175	172	156	169		
Calculated peak month cremations	189	242	238	195	216		
Level of practical (core) capacity in peak month		82%	81%	66%	73%		

Figure 71: Impact of Turners Hill upon Surrey & Sussex Crematorium (original PMA slot times)

Surrey & Sussex Crematorium	Year				Averages
	2016	2017	2018	2019	
Combined annual deaths in catchment area	10,239	10,557	10,458	10,631	10,471
Average deaths per month	853	880	872	886	873
Deaths in peak month	943	1,215	1,204	1,106	1,117
Percentage of annual deaths occurring in peak month	9.2%	11.5%	11.5%	10.4%	10.7%
Adjusted annual cremations, minus direct cremations	2,053	2,101	2,063	1,877	2,024
Total slots available	5,544				
Level of technical capacity	37%	38%	37%	34%	36%
Total core slots available	4,032				
Level of practical (core) capacity	51%	52%	51%	47%	50%
Average monthly core slots available	336				
Average monthly cremations	171	175	172	156	169
Calculated peak month cremations	189	242	238	195	216
Level of practical (core) capacity in peak month	56%	72%	71%	58%	64%

Figure 72: Impact of Turners Hill upon Surrey & Sussex Crematorium (alternative slot times)

- 10.40 The first table above uses my original understanding of slot availability and classification, whilst the second table uses the alternative capacity presented by Clyde & Co.
- 10.41 In both of the tables above, a reduction of 964 is applied to annual cremations at the Surrey and Sussex Crematorium for the years 2016 to 2019. This reflects the anticipated cremations that would be diverted to Turners Hill Crematorium, based upon 80% of deaths within its 45-minute drive-time catchment.
- 10.42 The diversion of cremations to Turners Hill Crematorium would have a significant beneficial impact upon the qualitative offer at Surrey and Sussex Crematorium. This would be achieved by reducing levels of capacity working to below 80% of practical capacity in the peak month of demand.
- 10.43 It is worthy of note that Clyde and Co, on behalf of Dignity, argue that the Surrey and Sussex Crematorium has *"far greater capacity"* than that with which I credit it. Not only do the tables above illustrate that the crematorium is definitely working at overcapacity, but they are based upon a 45 minute service interval, which creates greater capacity than a 60 minute service interval proposed for Turners Hill Crematorium and to which Dignity itself aspires at its crematoria.
- 10.44 At the Essington Appeal [CD 12.5], Dignity [CD 11.16] was critical, both of the existing Bushbury Crematorium and of Westerleigh's proposed new Essington Crematorium, for having only 45 minute service intervals, such as are provided by Dignity at the Surrey and Sussex Crematorium:
- 10.45 2.3 Dignity is extremely proud of the high standards to which its crematoria are built.All new-build crematoria by Dignity include the following features:

(a) 1 hour service slots (which can be contrasted, for example, with the current 45 minute slots at Bushbury Crematorium and Cemetery, Wolverhampton ("Bushbury") and the 45 minute slots at the proposed Essington development);³⁴

- 10.46 Indeed, Dignity went on to promote the very same benefit to Bushbury from the development of their proposed new crematorium at Wergs that applies to the Surrey and Sussex from the development of Turners Hill Crematorium.
- 10.47 3.22 I would add that, if permitted, the Appeal Scheme would, by relieving pressure at Bushbury, allow Bushbury to enhance its own qualitative offer e.g. by increasing its service times from 45 minutes to 60 minutes.

3.23 Dignity itself had such an experience at its Lancaster & Morecombe site, which is a single chapel facility and had an historic 45 minute chapel time.

3.24 A new-build crematorium was opened in the South Lakes area at Beetham Hall (16 kilometres north of Lancaster & Morecombe) in 2017 and diverted a number of cremations from the Lancaster & Morecombe Crematorium. In response, Dignity was able to increase its service time there to 60 minutes, to the benefit of those attending services at the facility.³⁵

- 10.48 The development of Turners Hill Crematorium would, by relieving pressure at the Surrey and Sussex Crematorium, enable the Surrey and Sussex Crematorium to enhance its own qualitative offer, for example, potentially by increasing its service interval from 45 minutes to 60 minutes.
- 10.49 The table below is based upon Dignity's classification of service time availability. It illustrates the hypothetical impact of changing two factors upon the crematorium's core capacity during the peak month of demand
 - extending the service interval to 60 minutes

³⁴ APP/C3430/W/15/3039163. Proof of Evidence of Alan Lathbury (Dignity)

• accounting for the potential diversion of 964 cremations per year to Turners Hill:

Sumar & Sugar Cramatarium		Ye	ar		Averages
Surrey & Sussex Crematorium	2016	2017	2018	2019	Averages
Combined annual deaths in catchment area	10,239	10,557	10,458	10,631	10,471
Average deaths per month	853	880	872	886	873
Deaths in peak month	943	1,215	1,204	1,106	1,117
Percentage of annual deaths occurring in peak month		11.5%	11.5%	10.4%	10.7%
Adjusted annual cremations, minus direct cremations		2,101	2,063	1,877	2,024
Total slots available	4,284				
Level of technical capacity		49%	48%	44%	47%
Total core slots available			3,276		
Level of practical (core) capacity	63%	64%	63%	57%	62%
Average monthly core slots available			273		
Average monthly cremations		175	172	156	169
Calculated peak month cremations		242	238	195	216
Level of practical (core) capacity in peak month		89%	87%	72%	79%

Figure 73: Potential impact of 60 minute service intervals and lower cremation numbers

- 10.50 The table above illustrates that, alongside a qualitative improvement through longer service intervals, there could be a significant reduction in over capacity working at the Surrey and Sussex Crematorium.
- 10.51 However, practical capacity in the peak month of demand is still above the 80% threshold in two of the four years. The projected increases in the numbers of deaths in the area would result in increased demand for cremation and higher levels of capacity working at the crematorium on a routine basis.
- 10.52 The challenge in achieving a balance between offering Dignity's stated ideal of 60 minute service intervals and achieving accepted levels of capacity working, even if 964 cremations were diverted to Turners Hill, is further evidence of the significant levels of overtrading at the Surrey and Sussex Crematorium.

10.53 Capacity at Woodvale Crematorium, Brighton

- 10.54 Woodvale Crematorium has two chapels. The Extra-Mural Cemetery Chapel is also available (*"some days of the week"*) for cremation funeral services. If this option is taken, a service time in one of the crematorium chapels must also be booked to enable the coffin to be transferred to the crematorium after the service. In 2019, 20 such services took place. In such instances, the fee for the use of the cemetery chapel is payable in addition to the standard crematorium fee. Capacity at Woodvale Crematorium is thus effectively provided by just two, rather than three chapels.
- 10.55 The table below illustrates the service times available at the Woodvale Crematorium:

Monday	to Friday			
-	-	Key		
		ncy		
08:30	08:30	Direct cremation		
09:00	09:30	Reduced fee		
10:00		Reduced fee		
	10:30	Core time		
11:00	11:30	Core time		
12:00	12:30	Core time		
13:00	13:30	Core time		
14:00	14:30	Core time		
15:00	15:30	Core time		
16:00		Non-core time		
	Daily			
8	7	15		
5	6	11		
Ν	/lonthly			
168	147	315		
105	126	231		
	Annual			
2,016	1,764	3,780		
1,260	1.512	2,772		
	Funeral St North 08:30 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 8 5 168 105 2,016	08:30 08:30 09:00 09:30 10:00 10:30 11:00 11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00 15:30 16:00 8 7 5 6 Unity 8 147 168 147 105 126 Language 2,016 1,764		

Figure 74: Funeral service times at the Woodvale Crematorium

10.56 Direct cremations are only available Mondays to Wednesdays.

10.57 The table below illustrates the levels of technical, practical and peak month practical capacity at the Woodvale Crematorium. A response to my Freedom of Information request [CD 11.15] stated that in 2019, 922 cremations funerals services took place in the North Chapel, whilst 933 took place in the South Chapel. These figures are therefore calculated on the basis of a 50% share of total funerals in each chapel.

Woodvale Crematorium		Ye	ear		Averages
	2016	2017	2018	2019	Averages
Combined annual deaths in catchment area		6,781	6,762	6,638	6,678
Average deaths per month	544	565	564	553	556
Deaths in peak month	608	793	809	693	726
Percentage of annual deaths occurring in peak month		11.7%	12.0%	10.4%	11.0%
Annual cremations, minus direct cremations		1,967	1,697	1,533	1,804
Total slots available	3,780				
Level of technical capacity		52%	45%	41%	50%
Total core slots available			2,772	2	
Level of practical (core) capacity	73%	71%	61%	55%	68%
Average monthly core slots available			231		
Average monthly cremations		164	141	128	150
Calculated peak month cremations		230	203	160	198
Level of practical (core) capacity in peak month		100%	88%	69%	85%

Figure 75: Capacity levels at Woodvale Crematorium 2016 to 2019

10.58 The table below illustrates actual deaths in 2019 and the ONS 2018-based projections for deaths in 2043 in the local authorities wholly or partly within the catchment of both Woodvale and The Downs crematoria:

A	Dea	iths	Projected Change			
Area	2019	2043	2020 to	o 2043		
Adur	703	865	162	23.0%		
Brighton and Hove	2,093	2,425	332	15.9%		
Horsham	1,311	2,021	710	54.2%		
Lewes	1,172	1,496	324	27.6%		
Mid Sussex	1,359	1,924	565	41.6%		
Totals	6,638	8,731	2,093 31.5			

Figure 76: ONS 2018-based population projections for deaths

10.59 The table below applies the average projected 31.5% increase in catchment deaths to the number of cremation funerals in 2019 at the Woodvale Crematorium to illustrate its potential capacity levels in 2043. These projections conservatively assume 50% share of total funerals in each chapel and excludes direct cremations from total cremations:

Woodvale Crematorium	2043
Combined annual deaths in catchment area	8,731
Average deaths per month	728
Deaths in peak month	912
Percentage of annual deaths occurring in peak month	10.4%
Annual cremations minus direct cremations	2,016
Total slots available	3,780
Level of technical capacity	53%
Total core slots available	2,772
Level of practical (core) capacity	73%
Average monthly core slots available	231
Average monthly cremations	168
Calculated peak month cremations	211
Level of practical (core) capacity in peak month	91%

Figure 77: Projected capacity levels in 2043

10.60 Capacity at The Downs Crematorium

- 10.61 The Downs Crematorium, has two chapels. The Main Chapel seats 100 people, whilst the Family Chapel seats only 25.
- 10.62 The table below illustrates the service times available at The Downs Crematorium:

	Monday to Friday		
	Funeral S	tart Times	Кеу
	Main	Family	
	08:15	08:15	Direct cremation
	08:20	08:20	Direct cremation
	08:30	08:30	Direct cremation
	09:00		Reduced fee service
	10:00	09:30	Non-core time
		10:30	Core time
	11:00	11:30	Core time
	12:00	12:30	Core time
	13:00	13:30	Core time
	14:00	14:30	Core time
	15:00	15:30	Core time
	16:00		Non-core time
		Daily	
Total slots	8	7	15
Core slots	5	6	11
		Monthly	
Total slots	168	147	315
Core slots	105	126	231
		Annual	
Total slots	2,016	1,764	3,780
Core slots	1,260	1,512	2,772

Figure 78: Funeral service times available at The Downs Crematorium

10.63 The table below illustrates the levels of technical, practical and peak month practical capacity at The Downs Crematorium. These figures assume a 50% share of total funerals in each chapel. There is no published data relating to the number of direct cremations at this crematorium, so the potential impact of these is omitted.

The Device Constantion		Ye	ear		•
The Downs Crematorium	2016	2017	2018	2019	Averages
Combined annual deaths in catchment area		6,781	6,762	6,638	6,678
Average deaths per month	544	565	564	553	556
Deaths in peak month	608	793	809	693	726
Percentage of annual deaths occurring in peak month		11.7%	12.0%	10.4%	11.0%
Annual cremations minus direct cremations		1,127	1,174	1,214	1,200
Total slots available	3,780				
Level of technical capacity		30%	31%	32%	32%
Total core slots available			2,772	2	
Level of practical (core) capacity		41%	42%	44%	43%
Average monthly core slots available			231		
Average monthly cremations		94	98	101	100
Calculated peak month cremations		132	140	127	132
Level of practical (core) capacity in peak month		57%	61%	55%	56%

Figure 79: Capacity levels at the Downs Crematorium 2016 to 2019

- 10.64 The survey of 50 obituaries relating to funerals at The Downs Crematorium found no references to any funerals that used the Family Chapel. The small seating capacity of this chapel makes it very suitable for funerals with small groups of mourners, but it is too small for most funerals.
- 10.65 The table below illustrates the significant impact upon the level of peak month capacity if the Main Chapel accommodates 60%, rather than 50%, of total funerals. It is likely that the proportion is in reality much higher, due to the distinct differences between the capacity of each chapel.

The Downs Crematorium		Ye	ear		Averages
The bowns crematorium		2017	2018	2019	
Combined annual deaths in catchment area		6,781	6,762	6,638	6,678
Average deaths per month	544	565	564	553	556
Deaths in peak month	608	793	809	693	726
Percentage of annual deaths occurring in peak month		11.7%	12.0%	10.4%	11.0%
Annual cremations minus direct cremations		676	704	728	720
Total slots available	2,016				
Level of technical capacity		34%	35%	36%	36%
Total core slots available			1,260)	
Level of practical (core) capacity		54%	56%	58%	57%
Average monthly core slots available			105		
Average monthly cremations		56	59	61	60
Calculated peak month cremations		79	84	76	78
Level of practical (core) capacity in peak month		75%	80%	72%	74%

Figure 80: Peak month capacity if the Main Chapel hosts 60% of funerals

10.66 The table below applies the average projected 26.4% increase in catchment deaths to the number of cremations in 2019 at The Downs Crematorium to illustrate its potential capacity levels in 2043. These projections very conservatively assume a 50% share of total funerals in each chapel:

The Downs Crematorium	2043
Combined annual deaths in catchment area	8,731
Average deaths per month	728
Deaths in peak month	912
Percentage of annual deaths occurring in peak month	10.4%
Annual cremations minus direct cremations	1,597
Total slots available	3,780
Level of technical capacity	42%
Total core slots available	2,772
Level of practical (core) capacity	58%
Average monthly core slots available	231
Average monthly cremations	133
Calculated peak month cremations	167
Level of practical (core) capacity in peak month	72%

Figure 81: Projected capacity levels in 2043

10.67 Capacity at the Kent and Sussex Crematorium

- 10.68 The Kent and Sussex Crematorium at Tunbridge Wells, opened in 1958, has a single chapel. However, the original cemetery chapel, opened in 1873 and now Grade 2 Listed, is also used for cremation funeral services.
- 10.69 The table below illustrates the service times available at the Kent and Sussex Crematorium:

	Monda	ay to Friday	
	Funeral	Start Times	Кеу
	Main	Cemetery	
	09:00		Reduced fee service
	09:30		Reduced fee service
	10:00	10:00	Non-core time
	10:45	10:45	Core time
	11:30	11:30	Core time
	12:15	12:15	Core time
	13:00	13:00	Core time
	13:45	13:45	Core time
	14:30	14:30	Core time
	15:15	15:15	Core time
	16:00	16:00	Reduced fee service
	16:30		Reduced fee service
		Daily	
Total slots	12	9	21
Core slots	7	7	14
		Monthly	
Total slots	252	189	441
Core slots	147	147	294
		Annual	
Total slots	3,024	2,268	5,292
Core slots	1,764	1,764	3,528

Figure 82 : Funeral service times available at the Kent and Sussex Crematorium

10.70 The table below illustrates the levels of technical, practical and peak month practical capacity at the Kent and Sussex Crematorium. These figures assume a 50% share of total funerals in each chapel and omit the 337 direct cremations undertaken during 2019.

Kant & Carrow Commetentian		Ye	ar		
Kent & Sussex Crematorium	2016	2017	2018	2019	Averages
Combined annual deaths in catchment area		4,947	5,226	5,228	5,056
Average deaths per month	402	412	436	436	421
Deaths in peak month	453	534	596	502	521
Percentage of annual deaths occurring in peak month		10.8%	11.4%	9.6%	10.3%
Annual cremations, minus direct cremations		2,414	2,572	1,951	2,321
Total slots available	5,292				
Level of technical capacity		46%	49%	37%	44%
Total core slots available			3,528		
Level of practical (core) capacity	66%	68%	73%	55%	66%
Average monthly core slots available			294		
Average monthly cremations		201	214	163	193
Calculated peak month cremations		261	293	187	240
Level of practical (core) capacity in peak month		89%	100%	64%	82%

Figure 83: Capacity levels at Kent & Sussex Crematorium 2016 to 2019

10.71 In response to my FOI request, Kent and Sussex Crematorium provided a very timely and helpful response [CD 11.14]. This included that in 2019, 387 (19%) of cremation funerals took place in the Cemetery Chapel. The table below illustrates the significant impact upon the level of peak month capacity of the main chapel in the crematorium undertaking 81%, rather than 50%, of cremation funerals during the past four years.

Kant & Sussay Cramatarium		Ye	ar		A	
Kent & Sussex Crematorium	2016	2017	2018	2019	Averages	
Combined annual deaths in catchment area		4,947	5,226	5,228	5,056	
Average deaths per month	402	412	436	436	421	
Deaths in peak month	453	534	596	502	521	
Percentage of annual deaths occurring in peak month		10.8%	11.4%	9.6%	10.3%	
Annual cremations, minus direct cremations		1,955	2,083	1,580	1,880	
Total slots available	3,024					
Level of technical capacity		65%	69%	52%	62%	
Total core slots available			1,764			
Level of practical (core) capacity	108%	111%	118%	90%	107%	
Average monthly core slots available			147			
Average monthly cremations		163	174	132	157	
Calculated peak month cremations		211	238	152	195	
Level of practical (core) capacity in peak month		144%	162%	103%	132%	

Figure 84: Peak month capacity of the main crematorium chapel holds 81% of cremation funerals

10.72 The table below illustrates actual deaths in 2019 and the ONS 2018-based projections for deaths in 2043 in the local authorities wholly or partly within the catchment of the Kent and Sussex Crematorium:

A	Dea	iths	Projected Change		
Area	2019	2043	2020 t	o 2043	
Sevenoaks	1,281	1,370	89	6.9%	
Tonbridge and Malling	1,062	1,466	404	38.0%	
Tunbridge Wells	1,074	1,471	397	37.0%	
Wealden	1,811	2,447	636	35.1%	
Totals	5,228	6,754	1,526	29.2%	

Figure 85: ONS 2018-based projections for deaths

10.73 The table below applies the average projected 29.2% increase in catchment deaths to the number of cremation funerals in 2019 at the Kent and Sussex Crematorium to illustrate its potential capacity levels in 2043. Direct cremations are excluded and the 81% figure for funerals in the main crematorium during 2019 is applied:

Kent & Sussex Crematorium	2043
Combined annual deaths in catchment area	6,754
Average deaths per month	563
Deaths in peak month	649
Percentage of annual deaths occurring in peak month	9.6%
Annual cremations, minus direct cremations	2,042
Total slots available	3,024
Level of technical capacity	68%
Total core slots available	1,764
Level of practical (core) capacity	116%
Average monthly core slots available	147
Average monthly cremations	170
Calculated peak month cremations	242
Level of practical (core) capacity in peak month	165%

Figure 86: Projected capacity levels in 2043

10.74 Summary of capacity at existing crematoria

- 10.75 In Section 8 of this proof of evidence, the drive-time catchment maps and the data tables reveal that Worthing Crematorium's catchment is constrained in the east by those of crematoria at Brighton and Crawley. Worthing Crematorium is simply too distant to be a realistic choice for people within Turners Hill Crematorium's catchment area, unless other specific factors take precedence. Its capacity is therefore not considered alongside other crematoria in this report.
- 10.76 The table below summarises the key findings of this section of the proof of evidence examining capacity levels at existing crematoria, on the basis that each chapel shares equally the cremation funerals at each crematorium. In the case of the Surrey and Sussex Crematorium, the first data column reflects my original assessment and the second my revised assessment, based upon the alternative figures provided by Dignity:

		Averages for 2016 to 2019 inclusive						
Factor	Surrey 8	& Sussex	Woodvale	Downs	Kent & Sussex			
Combined annual deaths in catchment area	10,4	471	6,678	6,678	5,056			
Average deaths per month	87	73	556	556	421			
Deaths in peak month	1,1	.17	726	726	521			
Percentage of annual deaths occurring in peak month	10.	10.7%		11.0%	9.4%			
Annual cremations, minus direct cremations	2,988		1,804	1,200	2,321			
Total slots available	5,040	5,544	3,780	3,780	5,292			
Level of technical capacity	59%	54%	53%	34%	44%			
Total core slots available	3,528	4,032	2,772	2,772	3,528			
Level of practical (core) capacity	85%	74%	73%	46%	66%			
Average monthly core slots available	294	336	231	231	294			
Average monthly cremations	24	19	150	100	193			
Calculated peak month cremations	318		198	132	240			
Level of practical (core) capacity in peak month	108%	95%	85%	56%	82%			

Figure 87: Average capacity levels 2016 to 2019, assuming an equal share of funerals per chapel

10.77 This report has shown that funerals are not equally shared between the chapels available at each crematorium and the table below illustrates the impact of this upon average capacity levels at existing crematoria. In the case of the Surrey and Sussex Crematorium, the first column reflects my original assessment and the second my revised assessment, based upon the alternative figures provided by Dignity:

	Averages for 2016 to 2019 inclusive						
Factor		& Sussex	Woodvale	Downs	Kent & Sussex		
Combined annual deaths in catchment area	10,4	471	6,678	6,678	5,056		
Average deaths per month	87	73	556	556	421		
Deaths in peak month	1,1	.17	726	726	521		
Percentage of annual deaths occurring in peak month	10.	7%	11.0%	11.0%	9.4%		
Annual cremations, minus direct cremations	1,793		1,804	720	1,880		
Total slots available	2,520	2,772	3,780	2,016	3,024		
Level of technical capacity	71%	65%	53%	36%	62%		
Total core slots available	1,764	2,016	2,772	1,260	1,764		
Level of practical (core) capacity	102%	89%	73%	57%	107%		
Average monthly core slots available	147	168	231	105	147		
Average monthly cremations	14	19	150	60	157		
Calculated peak month cremations	191		198	78	195		
Level of practical (core) capacity in peak month	130%	114%	85%	74%	132%		

Figure 88: Average capacity levels 2016 to 2019, reflecting unequal share of funerals per chapel

10.78 With the exception of The Downs, all the crematoria serving the area are working above 80% of practical capacity in the peak month of demand. Consideration of uneven usage of chapels reveals even higher levels.

10.79 Capacity at Wealden Crematorium

- 10.80 A new crematorium typically takes a few years to become established in terms of attracting all of the potential funerals from within its catchment area. Wealden Crematorium opened in May 2019 and, as a result, there is insufficient historic data to assess its capacity in the same way as the other long-established crematoria.
- 10.81 In Section 8 of this proof of evidence, the tables revealed the numbers of population and deaths within each drive-time of each crematorium. Using the data relating to Wealden, this section of the report now projects the core capacity in the peak month at Wealden Crematorium, as if it were already fully established. This is achieved by:
 - using the figure of 1,093 deaths within its 45-minute drive-time catchment from
 Figure 19 and applying 80%, the approximate average cremation rate for England in
 2018, to provide a realistic number of annual cremations at this crematorium: 874
 - applying 27% to the 874 cremations to provide the number of direct cremations, in line with the first part-year of operation
- 10.82 Wealden Crematorium offers 60 minute service intervals beginning on the hour from 10.00am until the last service, beginning at 4.00pm. In addition, it offers 15 minute slots for committal services, on the hour and half hour. Direct cremations are delivered to the crematorium at any time from 9.00am. They are received via a rear entrance to the building and have no impact upon the use of the chapel for funerals.

10.83 The table below illustrates the service times available at the Wealden Crematorium, with its single chapel:

	Monday to Friday					
	Funeral start times	Кеу				
	09:00	Direct Cı	remation			
	10:00	Non-co	re time			
	11:00	Core	time			
	12:00	Core time				
	13:00	Core time				
	14:00	Core	time			
	15:00	Core time				
	16:00	Non-core time				
Slots	Daily	Monthly Annua				
Total slots	7	147	1,764			
Core slots	5	105	1,260			

Figure 89: Funeral service times available at Wealden Crematorium

10.84 The table below illustrates the levels of technical, practical and peak month practical capacity at the Wealden Crematorium, as if it were already fully established.

	Year
Wealden Crematorium	2019
Combined annual deaths in catchment area	4,354
Average deaths per month	363
Deaths in peak month	460
Percentage of annual deaths occurring in peak month	10.6%
Annual cremations, minus direct cremations	638
Total slots available	1,764
Level of technical capacity	36%
Total core slots available	1,260
Level of practical (core) capacity	51%
Average monthly core slots available	105
Average monthly cremations	53
Calculated peak month cremations	67
Level of practical (core) capacity in peak month	64%

Figure 90: Hypothetical capacity levels at Wealden Crematorium in 2019

10.85 This suggests that the Wealden Crematorium can be expected to operate at 64% of core capacity in the peak month, significantly lower than other existing crematoria serving the population of the wider area considered in this report. This is a great qualitative benefit for those who will use this crematorium. However, its relatively distant location means that it does not serve the population who would use the Turners Hill Crematorium.

10.86 Capacity at Turners Hill Crematorium

- 10.87 This section of the report projects the hypothetical core capacity in the peak month at Turners Hill Crematorium, as if it were already established, in order to provide a comparison with existing crematoria.
- 10.88 Based upon BD's 1,205 catchment deaths in 2019, it is reasonable to expect 964 (80%) of these to result in cremation at Turners Hill Crematorium with 10% being direct cremations, were it operational. As discussed elsewhere within this proof of evidence, factors other than proximity may influence people's choice of crematorium, making 964 cremations per year an indicative figure.
- 10.89 The table below illustrates the proposed service times available at the Turners Hill Crematorium, with its single chapel:

	Мо	nday to Frid	day	
	Funeral start times	Кеу		
	09:00	Direct Cr	emation	
	09:30	Non-co	re time	
	10:30	Core	time	
	11:30	Core time		
	12:30	Core time		
	13:30	Core time		
	14:30	Core	time	
	15:30	Core	time	
	16:30	Non-core time		
Slots	Daily	Monthly	Annual	
Total slots	8	168	2,016	
Core slots	6	126	1,512	

Figure 91: Funeral service times available at Turners Hill Crematorium

10.90 The table below illustrates the hypothetical levels of technical, practical and peak month practical capacity at the Turners Hill Crematorium.

Turne and Hill Comments since	Year
Turners Hill Crematorium	2019
Combined annual deaths in catchment area	7,263
Average deaths per month	605
Deaths in peak month	756
Percentage of annual deaths occurring in peak month	10.4%
Annual cremations, minus direct cremations	868
Total slots available	2,016
Level of technical capacity	43%
Total core slots available	1,512
Level of practical (core) capacity	57%
Average monthly core slots available	126
Average monthly cremations	72
Calculated peak month cremations	90
Level of practical (core) capacity in peak month	71.7%

Figure 92: Hypothetical capacity levels in 2019

- 10.91 This table illustrates that Turners Hill Crematorium would operate at 72% of core capacity in the peak month, significantly lower than existing crematoria serving the population of the area.
- 10.92 The lower level of core capacity working would be combined with 60 minute funeral service intervals, which would provide time for mourners to leave the site before the arrival of any following funeral. A single chapel working well within accepted peak month capacity levels and offering 60 minute funeral service intervals would be a very significant qualitative benefit to the users of the crematorium.

11. Qualitative need for Turners Hill Crematorium

- 11.1 Qualitative need is established by considering the impact upon bereaved people of the ability of crematoria to address key issues:
 - availability of preferred slots, leading to delays between death and the funeral
 - journey times to crematoria
 - congestion at crematoria

11.2 Availability of preferred slots

- 11.3 The Essington Appeal [CD 12.4], referenced earlier in this report, sheds useful light on the importance of the availability to bereaved people of dates and times at crematoria to meet their particular needs and preferences:
- 11.4 215. Anecdotal evidence from funeral directors who use the cremation service offered at Bushbury indicates that an acceptable qualitative standard is also not being met. In this regard funeral services are taking longer than is acceptable to arrange at times to suit bereaved families and funeral directors are advising some families that earlier services could be arranged at crematoria further away than is generally regarded to be acceptable. The substandard quantitative offer at Bushbury is adversely affecting the crematorium's ability to offer a quality service to bereaved families.³⁶
- 11.5 128. "Further, the overtrading has led to unacceptable delays between the date of death and date of cremation. Analysis undertaken by Dignity (and unchallenged by any party to the inquiry) shows that average waiting times between date of death and date of cremation are materially longer than either Telford or other crematoria in the area. This is a very clear qualitative deficiency which has resulted from the quantitative overtrading."³⁷

³⁶ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire ³⁷ APP/C3430/W/15/3039163 Land off Broad Lane, Essington, South Staffordshire

- 11.6 35. Of greater concern is the evidence submitted indicating the delay between death and funeral. It is apparent from this that over 80% of funerals take place at least 7 days after death. These figures support the perceptions encompassed in submissions from funeral directors and clergy which point to significant difficulty in mourners achieving their preferred time and day for funerals and consequential delays ad compromise. Such pressures are clearly greater in winter with increased delays during January and February in particular, with. Significant proportion extending to over two weeks from date of death. While these delays can only be partly explained by Coroner delays or similar, this presents substantial evidence of pressures on the capacity at Penmount [Crematorium] to meet the qualitative needs of such a large population.³⁸
- 11.7 In the Swanwick Appeal decision³⁹ [CD 12.8], the Inspector Harold Stephens stated:
- 11.8 30 The consensus amongst funeral directors was that unacceptable delays of 2 or 3 weeks are encountered during the winter months. The employees or operators of the existing crematoria disagree. However, those employees or operators have a vested interest in painting a rosy picture of their own operations.
- 11.9 It is well established that a number of factors contribute to delays between death and funeral. These factors include:
 - the process of registration of the death;
 - involvement of the coroner;
 - requirement for an autopsy;
 - personal circumstances of the family members;
 - availability of the Funeral Director and Officiant.

³⁸ APP/D0840/A/09/2098108 Land at Race Farm, Puggis Hill, Treswithian, Camborne, Cornwall

³⁹ Appeal Ref: APP/M1005/A/12/2188880 Land east of Derby Road, Swanwick, Derbyshire.

- 11.10 A key factor contributing to delays between death and funeral is the availability of the family's preferred date and time for the funeral at the crematorium.
- 11.11 Obituaries published online provide a completely random and independent sample of factual evidence relating to the period between death and cremation. The author of this report undertook a survey of obituaries published on-line, seeking 50 obituaries relating to each of four crematoria as a reasonable sample size. This sample, totalling 200 obituaries, is summarised in the table below, with detail shown overleaf:

Crematorium	Obituaries	Days betw	een death and	Funerals delayed	
Crematorium	Obituaries	Minimum	Maximum	Average	beyond average period
Surrey and Sussex	50	10	62	25	38%
Woodvale	50	10	35	23	40%
The Downs	50	10	38	21	48%
Kent and Sussex	50	12	47	25	48%
Averages		11	46	23	44%

Figure 93: Days between death and funeral

Surrey	& Sussex		Wo	odvale		The Downs			Kent a	and Sussex	
Death	Funeral	Days									
05/11/2019	15/11/2019	10	19/11/2019	29/11/2019	10	15/07/2019	25/07/2019	10	24/07/2018	03/08/2018	10
28/06/2019	12/07/2019	14	30/10/2019	13/11/2019	14	16/08/2019	27/08/2019	11	10/02/2018	22/02/2018	12
06/06/2019	21/06/2019	15	29/10/2019	13/11/2019	15	10/07/2019	22/07/2019	12	09/11/2019	21/11/2019	12
29/07/2019	13/08/2019	15	15/12/2019	30/12/2019	15	16/08/2019	28/08/2019	12	07/11/2019	20/11/2019	13
31/07/2019	15/08/2019	15	03/10/2019	18/10/2019	15	29/06/2019	12/07/2019	13	04/06/2019	20/06/2019	16
31/07/2019	15/08/2019	15	03/10/2019	18/10/2019	15	03/08/2019	16/08/2019	13	21/08/2019	06/09/2019	16
12/06/2019	28/06/2019	16	15/10/2019	31/10/2019	16	09/08/2019	23/08/2019	14	12/08/2019	29/08/2019	17
21/01/2019	07/02/2019	17	14/10/2019	30/10/2019	16	29/07/2019	13/08/2019	15	27/04/2019	15/05/2019	18
20/04/2019	07/05/2019	17	08/10/2019	25/10/2019	17	14/08/2019	29/08/2019	15	09/06/2019	27/06/2019	18
25/06/2019	12/07/2019	17	10/10/2019	28/10/2019	18	30/06/2019	16/07/2019	16	01/08/2019	19/08/2019	18
20/08/2019	06/09/2019	17	14/10/2019	01/11/2019	18	17/07/2019	02/08/2019	16	31/05/2019	19/06/2019	19
16/11/2019	04/12/2019	18	07/11/2019	25/11/2019	18	30/06/2019	17/07/2019	17	24/08/2019	12/09/2019	19
09/12/2019	27/12/2019	18	24/11/2019	12/12/2019	18	27/08/2019	13/09/2019	17	28/09/2019	17/10/2019	19
28/12/2019	15/01/2020	18	21/09/2019	09/10/2019	18	27/07/2019	14/08/2019	18	22/11/2019	11/12/2019	19
22/12/2018	10/01/2019	19	19/10/2019	07/11/2019	19	09/08/2019	27/08/2019	18	20/06/2019	10/07/2019	20
07/02/2019	27/02/2019	20	13/10/2019	01/11/2019	19	30/08/2019	17/09/2019	18	25/06/2019	15/07/2019	20
27/12/2019	16/01/2020	20	26/10/2019	14/11/2019	19	26/06/2019	15/07/2019	19	03/12/2019	23/12/2019	20
06/11/2019	27/11/2019	21	12/10/2019	01/11/2019	20	20/07/2019	08/08/2019	19	06/06/2017	27/06/2017	21
19/12/2019	09/01/2020	21	28/09/2019	18/10/2019	20	18/08/2019	06/09/2019	19	22/07/2019	12/08/2019	21
12/12/2018	03/01/2019	22	28/09/2019	18/10/2019	20	23/07/2019	12/08/2019	20	04/10/2019	25/10/2019	21
14/03/2019	05/04/2019	22	26/11/2019	16/12/2019	20	20/07/2019	09/08/2019	20	29/10/2019	19/11/2019	21
16/04/2019	08/05/2019	22	16/10/2019	06/11/2019	21	10/08/2019	30/08/2019	20	18/09/2018	11/10/2018	23
16/06/2019	08/07/2019	22	04/10/2019	25/10/2019	21	31/08/2019	20/09/2019	20	27/05/2019	19/06/2019	23
09/10/2019	01/11/2019	23	24/12/2019	15/01/2020	22	26/06/2019	17/07/2019	21	28/08/2017	21/09/2017	24
01/01/2020	24/01/2020	23	05/11/2019	27/11/2019	22	24/06/2019	15/07/2019	21	31/08/2019	24/09/2019	24
13/01/2019	06/02/2019	24	24/11/2019	16/12/2019	22	30/07/2019	20/08/2019	21	22/09/2019	16/10/2019	24
10/02/2019	06/03/2019	24	24/10/2019	15/11/2019	22	03/07/2019	25/07/2019	22	26/05/2019	20/06/2019	25
25/03/2019	18/04/2019	24	25/11/2019	18/12/2019	23	10/07/2019	01/08/2019	22	13/06/2019	08/07/2019	25
03/08/2019	27/08/2019	24	15/10/2019	07/11/2019	23	23/07/2019	14/08/2019	22	15/12/2019	09/01/2020	25
16/12/2019	09/01/2020	24	02/11/2019	25/11/2019	23	30/07/2019	21/08/2019	22	21/12/2019	15/01/2020	25
23/12/2019	17/01/2020	25	01/10/2019	25/10/2019	24	05/08/2019	27/08/2019	22	30/06/2019	26/07/2019	26
21/11/2019	17/12/2019	26	15/11/2019	09/12/2019	24	08/08/2019	30/08/2019	22	20/07/2019	15/08/2019	26
04/01/2019	01/02/2019	28	27/10/2019	21/11/2019	25	27/08/2019	18/09/2019	22	07/08/2019	02/09/2019	26
11/01/2019	08/02/2019	28	18/11/2019	13/12/2019	25	10/07/2019	02/08/2019	23	17/08/2019	12/09/2019	26
17/01/2019	14/02/2019	28	27/09/2019	22/10/2019	25	31/07/2019	23/08/2019	23	01/11/2019	27/11/2019	26
27/06/2019	25/07/2019	28	31/10/2019	26/11/2019	26	17/08/2019	09/09/2019	23	08/05/2019	04/06/2019	27
25/07/2019	22/08/2019	28	02/11/2019	28/11/2019	26	17/08/2019	09/09/2019	23	21/06/2019	18/07/2019	27
26/07/2019	23/08/2019	28	08/11/2019	06/12/2019	28	05/07/2019	29/07/2019	24	22/05/2018	19/06/2018	28
06/01/2019	05/02/2019	30	06/11/2019	04/12/2019	28	09/07/2019	02/08/2019	24	28/06/2019	26/07/2019	28
11/05/2019	10/06/2019	30	02/12/2019	30/12/2019	28	30/07/2019	23/08/2019	24	21/12/2016	19/01/2017	29
05/07/2019	05/08/2019	31	22/11/2019	20/12/2019	28	17/08/2019	10/09/2019	24	29/07/2019	27/08/2019	29
08/10/2019	11/11/2019	34	08/10/2019	05/11/2019	28	22/08/2019	16/09/2019	25	26/09/2019	28/10/2019	32
16/01/2019	20/02/2019	35	12/09/2019	10/10/2019	28	12/07/2019	08/08/2019	27	04/08/2019	06/09/2019	33
30/08/2019	04/10/2019	35	20/12/2019	20/01/2020	31	10/06/2019	09/07/2019	29	03/12/2019	06/01/2020	34
19/01/2019	25/02/2019	37	04/11/2019	06/12/2019	32	23/06/2019	22/07/2019	29	16/04/2018	21/05/2018	35
01/04/2019	08/05/2019	37	13/09/2019	15/10/2019	32	10/09/2019	09/10/2019	29	05/05/2019	11/06/2019	37
17/10/2019	25/11/2019	39	27/10/2019	29/11/2019	33	21/07/2019	20/08/2019	30	08/09/2019	15/10/2019	37
07/12/2019	17/01/2020	41	30/11/2019	03/01/2020	34	28/08/2019	27/09/2019	30	08/06/2019	16/07/2019	38
17/12/2018	29/01/2019	43	05/12/2019	09/01/2020	35	08/07/2019	12/08/2019	35	18/10/2019	26/11/2019	39
21/02/2019	24/04/2019	62	20/09/2019	25/10/2019	35	20/08/2019	27/09/2019	38	11/09/2019	28/10/2019	47

Figure 94: 200 Obituaries sorted by period between death and funeral

11.12 Further research and analysis of obituaries were subsequently undertaken relating to the Surrey and Sussex Crematorium. A further 144 obituaries were identified, which necessitated going back as far as a death in September 2014. The chart below combines the data from the total 194 obituaries relating to the Surrey and Sussex Crematorium:

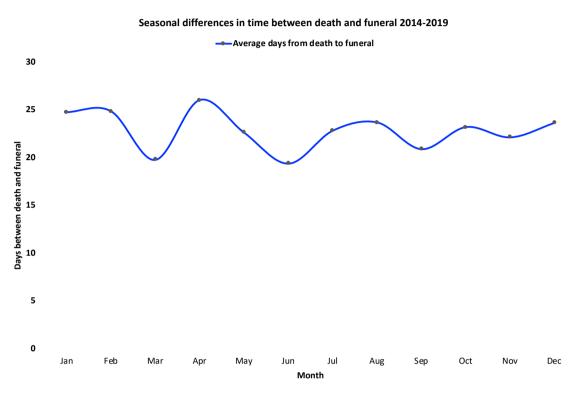


Figure 95: Delays between death and funeral at the Surrey and Sussex Crematorium

11.13 The table below summarises these obituaries:

Month	Funerals identified	Average days from death to funeral
Jan	19	25
Feb	20	25
Mar	5	20
Apr	17	26
May	11	23
Jun	17	19
Jul	23	23
Aug	19	24
Sep	11	21
Oct	15	23
Nov	15	22
Dec	22	24
	194	23

Figure 96: Average days from death to funeral at the Surrey and Sussex Crematorium

11/10/2014 601/2014 72 24/21/2011 11/01/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13 21/10/2013 13/10/2013 13 21/10/2013	Death	Funeral	Days	Death	Funeral	Days		Death	Funeral	Days	Death	Funeral	Days
0.002/0015 1.90 2.71 2.71/1.2/0017 3.901/2.015 3.3 3.900/0015 3.2000/0015 1.000/0015 <th1.000015< th=""> <th1.000015< th=""> <th< td=""><td>11/09/2014</td><td>08/10/2014</td><td>27</td><td>24/12/2017</td><td>11/01/2018</td><td>18</td><td></td><td>21/06/2018</td><td>16/07/2018</td><td>25</td><td>17/12/2018</td><td>29/01/2019</td><td>43</td></th<></th1.000015<></th1.000015<>	11/09/2014	08/10/2014	27	24/12/2017	11/01/2018	18		21/06/2018	16/07/2018	25	17/12/2018	29/01/2019	43
1702/2015 04/04/2015 15 0/02/2017 18/01/2018 19/0 0/02/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 0/00/2018 21/0 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2018 21/0/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2	25/09/2014	08/10/2014	13	25/12/2017	11/01/2018	17		24/06/2018	23/07/2018	16	22/12/2018	10/01/2019	19
31/05/2015 17/06/2015 17 30/12/2017 30/01/2018 21/01/2018	02/02/2015	19/02/2015	17	27/12/2017	29/01/2018	33		26/06/2018	12/07/2018	20	04/01/2019	01/02/2019	28
bit bit< bit< <td>17/02/2015</td> <td>04/03/2015</td> <td>15</td> <td>30/12/2017</td> <td>18/01/2018</td> <td>19</td> <td></td> <td>04/07/2018</td> <td>24/07/2018</td> <td>17</td> <td>06/01/2019</td> <td>05/02/2019</td> <td>30</td>	17/02/2015	04/03/2015	15	30/12/2017	18/01/2018	19		04/07/2018	24/07/2018	17	06/01/2019	05/02/2019	30
21/03/2016 08/04/2016 18 0/01/2018 01/02/2018 22 1 12/07/2018 23/08/2018 23 1 1 0 0	31/05/2015	17/06/2015	17	30/12/2017	30/01/2018	31		06/07/2018	23/07/2018	32	11/01/2019	08/02/2019	28
2404/2010 04/05/2010 10 22/01/2018 15/07/2018 15/07/2018 15/07/2018 15/07/2018 15/07/2018 15/07/2018 05/07/2018 02/01/2010 02/01/2010 02/01/2010 02/01/2010 02/01/2010 02/01/2018	08/01/2016	28/01/2016	20	08/01/2018	25/01/2018	17		12/07/2018	13/08/2018	42	13/01/2019	06/02/2019	24
2005/2016 03/06/2016 14 24/01/2018 13/02/2018 13/02/2018 14/07/2018 03/08/2018 24 19/02/2019 25/02/2019 23/02/2019 23/02/2018 24/02/2018 19/02/2018 11/07/2018 03/08/2018 21 07/02/2019 21 20/05/2016 24/06/2016 18 01/02/2018 24/07/2018 24/07/2018 11/07/2018 10/02/2018 11/07/2018 10/02/2018 11/07/2018 10/02/2018 11/07/2018 10/02/2018 01/02/2018 01/02/2018 01/02/2018 01/02/2018 01/02/2018 01/02/2018 11/07/2018 10/02/2018 11/07/2018 10/02/2018 01/02/2018 01/02/2018 01/02/2018 11/07/2018 23/09/2018 23/09/2018 23 10/02/2019 23 10/02/2018 11/02/2018 20/02/2018 23/02/2018 23/02/2018 23 10/02/2019 23/02/2019 23 10/02/2018 23/02/2018 23 10/02/2018 23 10/02/2019 23 10/02/2018 23/02/2018 23/02/2019 23/02/2019 23/02/2019 23/02/2019 2	21/03/2016	08/04/2016	18	10/01/2018	01/02/2018	22		12/07/2018	23/08/2018	34	16/01/2019	20/02/2019	35
2005/2016 09/06/2016 20 24/01/2018 07/02/2018 12 16/07/2018 09/06/2018 22 21/01/2019 07/02/2019 17 25/05/2016 24/06/2016 30 24/01/2018 07/02/2018 14 20/07/7018 11/08/2018 15 10/02/2019 66/03/2019 62/03/2019	24/04/2016	04/05/2016	10	22/01/2018	16/02/2018	25		13/07/2018	16/08/2018	20	17/01/2019	14/02/2019	28
25/05/2016 24/06/2016 30 24/01/2018 07/02/2018 11/06/2018	20/05/2016	03/06/2016	14	24/01/2018	13/02/2018	20		14/07/2018	03/08/2018	24	19/01/2019	25/02/2019	37
1006/2016 28/06/2016 18 01/02/2018 26/03/2018 53 21/07/2018 07/08/2018 15 10/02/2019 24/04/2019 62 25/06/2016 14/07/2016 19 02/02/2018 11/02/2018 21/02/2018 10/02/2018 21/02/2019 24/04/2019 62 01/08/2016 17/08/2016 10 05/02/2018 01/02/2018 21/02/2019 21/02/2019 <t< td=""><td>20/05/2016</td><td>09/06/2016</td><td>20</td><td>24/01/2018</td><td>19/02/2018</td><td>26</td><td></td><td>16/07/2018</td><td>09/08/2018</td><td>22</td><td>21/01/2019</td><td>07/02/2019</td><td>17</td></t<>	20/05/2016	09/06/2016	20	24/01/2018	19/02/2018	26		16/07/2018	09/08/2018	22	21/01/2019	07/02/2019	17
25/06/2016 14/07/2016 19 02/02/2018 21/02/2018 21/02/2018 17 02/07/2018 17/08/2018 12 21/02/2019 24/04/2019 62 01/08/2016 11/08/2016 11/08/2016 05/02/2018 02/03/2018 21 02/08/2018 28/08/2018 28 25/03/2019 18/04/2019 24 25/08/2016 15/09/2016 11/ 08/02/2018 01/03/2018 21 0.0/08/2018 21.00/2018 21.00/2018 21.00/2018 21.00/06/2019 21 21.00/07/2019 08/07/2019 12 21.00/07/2019 08/07/2019 17 21.00/2018 28/02/2018 18 0.0/08/2018 20.80/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 11.00/07/2018 12 <td< td=""><td>25/05/2016</td><td>24/06/2016</td><td>30</td><td>24/01/2018</td><td>07/02/2018</td><td>14</td><td></td><td>20/07/2018</td><td>11/08/2018</td><td>17</td><td>07/02/2019</td><td>27/02/2019</td><td>20</td></td<>	25/05/2016	24/06/2016	30	24/01/2018	07/02/2018	14		20/07/2018	11/08/2018	17	07/02/2019	27/02/2019	20
02/07/2016 14/07/2016 12 02/02/2018 19/02/2018 17 0 02/08/2018 17/08/2018 25 0 02/08/2018 28 25/03/2019 18/04/2019 24 29/08/2016 15/09/2016 17 08/02/2018 01/03/2018 21 03/08/2018 31/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 19 0.6/06/2019 10 0.6/06/2019 10 17 0.6/02/2017 10 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2017 10 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.	10/06/2016	28/06/2016	18	01/02/2018	26/03/2018	53		21/07/2018	07/08/2018	15	10/02/2019	06/03/2019	24
02/07/2016 14/07/2016 12 02/02/2018 19/02/2018 17 0 02/08/2018 17/08/2018 25 0 02/08/2018 28 25/03/2019 18/04/2019 24 29/08/2016 15/09/2016 17 08/02/2018 01/03/2018 21 03/08/2018 31/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 18 0.6/08/2018 19 0.6/06/2019 10 0.6/06/2019 10 17 0.6/02/2017 10 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2017 10 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.0/02/2018 1.	25/06/2016	14/07/2016	19	02/02/2018	21/02/2018	19		25/07/2018	09/08/2018	15	21/02/2019	24/04/2019	62
01/08/2016 17/08/2016 16 05/02/2018 02/03/2018 25 0 02/08/2018 28/08/2018 28 25/03/2019 18/04/2019 24 29/08/2016 15/09/2016 17 08/02/2018 02/03/2018 21 03/08/2018 23 16/03/2019 08/05/2019 37 30/08/2016 12/10/2016 10 08/02/2018 16/03/2018 21/08/2018 23 16/03/2019 08/05/2019 37 2/09/2016 17/11/2016 20 20/02/2018 13/03/2018 21 16/08/2018 29/08/2018 25 11/05/2019 21/05/2019 30 2/10/2016 17/11/2016 27 21/02/2018 13/03/2018 21 23/08/2018 20/08/2018 33 12/06/2019 21/05/2019 31 22/06/2018 34 25/06/2019 31 22/06/2019 31 22/06/2018 34 25/06/2019 31 32/06/2019 31 21/01/2017 16/02/2017 21 02/02/2018 31 22/06/2018 34 22/06/2	02/07/2016		12			17				26			22
30/08/2016 15/09/2016 16 08/02/2018 16/03/2018 36 0 05/08/2018 21 16/04/2019 08/05/2019 22 12/09/2016 29/09/2016 17 10/02/2018 28/02/2018 18 06/08/2018 29/08/2018 18 20/04/2019 07/05/2019 17 22/09/2016 12/10/2016 20 20/02/2018 13/03/2018 12 10/08/2018 29/08/2018 21 10/08/2018 29/08/2018 21 10/09/2018 21 10/09/2018 21 21/06/2019 21 21/06/2019 21 21/06/2018 21 23/08/2018 27/09/2018 20 16/06/2019 28/06/2019 12/07/2019 12 21/01/2017 15/02/2017 13 28/02/2018 23/08/2018 21/08/2018 34 25/06/2019 12/07/2019 12 21/01/2017 26 0/03/2018 03/04/2018 31 23/08/2018 24/08/2018 24/08/2018 24/08/2018 24/08/2018 14 25/07/2019 25/07/2019 23/08/2019 2	01/08/2016		16			25				28		18/04/2019	24
12/09/2016 29/09/2016 17 10/02/2018 28/02/2018 18 0 06/08/2018 29/08/2018 18 20/04/2019 07/05/2019 11/05/2019 10/05/2019 13/05/2018 13/05/2018 13/05/2018 13/05/2018 13/05/2018 13/05/2018 13/05/2018 13/05/2018 13/05/2019 13/05/2019 13/05/2019 13/05/2019 </td <td></td> <td></td> <td>17</td> <td></td> <td></td> <td>21</td> <td></td> <td></td> <td></td> <td>16</td> <td></td> <td></td> <td>37</td>			17			21				16			37
22/09/2016 12/10/2016 20 20/02/2018 31/03/2018 21 1 10/08/2018 25 11/05/2019 10/06/2019 30 26/10/2016 17/11/2016 22 21/02/2018 13/03/2018 12 1 16/08/2018 10/09/2018 19 06/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 21/06/2019 12/07/019 12 21/01/2017 16/02/2017 26 20/03/2018 03/04/2018 14 23/08/2018 26/09/2018 14 25/06/2019 12/07/2019 14 04/02/2017 27/02/2017 21 02/04/2018 03/05/2018 31 24/08/2018 04/10/2018 12 05/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/07/2019 25/06/2019 15/07/2019 25/07	30/08/2016		16			36				23		08/05/2019	22
26/10/2016 17/11/2016 22 21/02/2018 14/03/2018 21 16/08/2018 10/09/2018 31 06/06/2019 21/06/2019 15 31/12/2016 27/01/2017 27 25/02/2018 3/03/2018 16 18/08/2018 06/09/2018 35 12/06/2019 28/06/2019 12 18/01/2017 06/02/2017 19 31/03/2018 03/04/2018 12 23/08/2018 21/09/2018 34 25/06/2019 12/07/2019 12 10/01/2017 16/02/2017 22 02/03/2018 03/04/2018 31 24/08/2018 04/10/2018 25 28/06/2019 12/07/2019 14 04/02/2017 27/02/2017 23 07/04/2018 03/05/2018 31 24/08/2018 04/09/2018 14 25/07/2019 22/08/2019 32 22/07/2019 22/08/2019 32 22/08/2019 32 32/07/2019 22/08/2019 22 22/08/2019 22 22/08/2019 22 22/08/2019 22 22/08/2019 22/08/2019 22/08/2019	12/09/2016	29/09/2016	17	10/02/2018	28/02/2018	18		06/08/2018	29/08/2018	18	20/04/2019	07/05/2019	17
26/10/2016 17/11/2016 22 21/02/2018 14/03/2018 21 16/08/2018 10/09/2018 19 06/06/2019 21/06/2019 15 31/12/2016 27/01/2017 27 25/02/2018 13/03/2018 16 18/08/2018 06/09/2018 35 12/06/2019 28/06/2019 12 18/01/2017 15/02/2017 33 28/02/2018 23/08/2018 21/09/2018 34 25/06/2019 12/07/2019 12 18/01/2017 16/02/2017 21 02/04/2018 03/04/2018 31 24/08/2018 04/02/018 41 27/06/2019 12/07/2019 14 04/02/2017 27/02/2017 23 07/04/2018 33/05/2018 31 24/08/2018 04/09/2018 14 25/07/2019 23/08/2019 12 12/07/2019 12 05/07/2019 33 04/09/2018 17/09/2018 14 25/07/2019 23/08/2019 12 12 05/07/2019 23/08/2019 12 13/03/2019 12 12 05/07/2019 12 12/06/2018	22/09/2016	12/10/2016	20	20/02/2018	13/03/2018	21		10/08/2018	28/08/2018	25	11/05/2019	10/06/2019	30
15/01/2017 15/02/2017 31 28/02/2018 22/03/2018 22 23/08/2018 27/09/2018 20 16/06/2019 08/07/2019 22 18/01/2017 06/02/2017 19 13/03/2018 03/04/2018 21 23/08/2018 12/09/2018 34 25/06/2019 12/07/2019 12 21/01/2017 16/02/2017 21 02/04/2018 03/04/2018 31 24/08/2018 04/10/2018 24 28/06/2019 12/07/2019 14 04/02/2017 23/02/2017 21 02/04/2018 03/05/2018 36 01/09/2018 17/09/2018 14 25/07/2019 22/08/2019 12/07/201 14 04/02/2017 10/03/2017 22 09/04/2018 13/05/2018 36 01/09/2018 17/09/2018 14 25/07/2019 23/08/2019 28 10/06/2017 11/07/2017 21 10/04/2018 03/05/2018 13 03/01/2018 31 31/07/2019 13/08/2019 15 06/07/2017 17/07/2017 21 15/04/2018			22	21/02/2018		21			10/09/2018	19	06/06/2019		15
15/01/2017 15/02/2017 31 28/02/2018 22/03/2018 22 23/08/2018 27/09/2018 20 16/06/2019 08/07/2019 22 18/01/2017 06/02/2017 19 13/03/2018 03/04/2018 21 23/08/2018 12/09/2018 34 25/06/2019 12/07/2019 12 21/01/2017 16/02/2017 21 02/04/2018 03/04/2018 31 24/08/2018 04/10/2018 24 28/06/2019 12/07/2019 14 04/02/2017 23/02/2017 21 02/04/2018 03/05/2018 36 01/09/2018 17/09/2018 14 25/07/2019 22/08/2019 12/07/201 14 04/02/2017 10/03/2017 22 09/04/2018 13/05/2018 36 01/09/2018 17/09/2018 14 25/07/2019 23/08/2019 28 10/06/2017 11/07/2017 21 10/04/2018 03/05/2018 13 03/01/2018 31 31/07/2019 13/08/2019 15 06/07/2017 17/07/2017 21 15/04/2018	31/12/2016	27/01/2017	27			16				35			16
21/01/2017 16/02/2017 26 20/03/2018 03/04/2018 14 23/06/2018 26/09/2018 41 27/06/2019 25/07/2019 28 02/02/2017 23/02/2017 21 02/04/2018 03/05/2018 31 24/08/2018 04/10/2018 25 28/06/2019 12/07/2019 14 04/02/2017 27/02/2017 23 07/04/2018 23/04/2018 16 26/08/2018 20/09/2018 16 05/07/2019 25/08/2019 31 09/02/2017 10/03/2017 20 09/04/218 15/05/2018 36 01/09/2018 14/09/2018 14 25/07/2019 22/08/2019 28 02/06/2017 11/07/2017 21 10/04/2018 23 04/09/2018 03/10/2018 31 31/07/2019 15/08/2019 15 16/07/2017 11/07/2017 21 15/04/2018 15/05/2018 03 14/09/2018 23/10/2018 31 31/07/2019 15/08/2019 15 19/07/2017 17/08/2017 22 15/04/2018 11/05/2018		15/02/2017	31	28/02/2018		22			27/09/2018	20		08/07/2019	22
21/01/2017 16/02/2017 26 20/03/2018 03/04/2018 14 23/08/2018 26/09/2018 41 27/06/2019 25/07/2019 28 02/02/2017 23/02/2017 21 02/04/2018 03/05/2018 31 24/08/2018 04/10/2018 25 28/06/2019 12/07/2019 14 04/02/2017 27/02/2017 23 07/04/2018 23/04/2018 16 26/08/2018 20/09/2018 16 05/07/2019 05/08/2019 31 09/02/2017 10/03/2017 20 09/04/2018 13/05/2018 36 01/09/2018 14/09/2018 29 26/07/2019 22/08/2019 28 2/00/2017 11/07/2017 21 10/04/2018 03/05/2018 13 01/09/2018 03/01/2018 39 29/07/2019 13/08/2019 15 18/07/2017 17/107/2017 21 15/04/2018 15/05/2018 03 14/09/2018 30/10/2018 20 03/08/2019 15/08/2019 15 19/07/2017 17/08/2017 22 15/04/201	18/01/2017	06/02/2017	19	13/03/2018	03/04/2018	21		23/08/2018	12/09/2018	34	25/06/2019	12/07/2019	17
02/02/2017 23/02/2017 21 02/04/2018 03/05/2018 31 24/08/2018 04/10/2018 25 28/06/2019 12/07/2019 14 04/02/2017 27/02/2017 23 07/04/2018 15/05/2018 36 01/09/2018 11/09/2018 14 25/07/2019 22/08/2019 28 12/02/2017 10/03/2017 26 10/04/2018 15/05/2018 23 04/09/2018 18/09/2018 14 25/07/2019 22/08/2019 28 20/06/2017 11/07/2017 21 10/04/2018 27/04/2018 13/05/2018 30 14/09/2018 33/10/2018 31 31/07/2019 13/08/2019 15 06/07/2017 27/07/2017 21 15/04/2018 10/05/2018 25 28/09/2018 11/10/2018 24 31/07/2019 13/08/2019 15 18/07/2017 14/08/2017 22 19/04/2018 08/05/2018 19 06/10/2018 30/10/2018 24 31/07/2019 13/08/2019 17 30/07/2017 14/08/8/2017 <td< td=""><td>21/01/2017</td><td></td><td>26</td><td></td><td></td><td>14</td><td></td><td></td><td></td><td>41</td><td></td><td></td><td>28</td></td<>	21/01/2017		26			14				41			28
04/02/2017 27/02/2017 2.3 07/04/2018 2.3/04/2018 16 2.6/08/2018 20/09/2018 1.6 0.5/07/2019 0.5/08/2019 3.1 09/02/2017 01/03/2017 2.0 09/04/2018 15/05/2018 3.6 01/09/2018 17/09/2018 1.4 25/07/2019 22/08/2019 2.8 12/02/2017 10/03/2017 2.6 10/04/2018 27/04/2018 1.7 04/09/2018 3.9 26/07/2019 23/08/2019 2.8 20/06/2017 11/07/2017 2.1 10/04/2018 2.7/04/2018 3.0 1.4/09/2018 3.1/0/2018 3.9 29/07/2019 1.5/08/2019 1.5 06/07/2017 27/07/2017 2.1 15/04/2018 10/05/2018 2.5 2.8/09/2018 1.1/0/2018 3.1 3.1/07/2019 1.5/08/2019 1.5 19/07/2017 17/08/2017 2.7 15/04/2018 1.9 0.6/10/2018 3.0/10/2018 2.0 2.0/08/2019 0.4/10/2019 1.7 30/07/2017 16/08/2017 1.8 2.5/04/2018 <t< td=""><td>02/02/2017</td><td></td><td>21</td><td></td><td></td><td>31</td><td></td><td></td><td></td><td>25</td><td></td><td></td><td>14</td></t<>	02/02/2017		21			31				25			14
12/02/2017 10/03/2017 2.6 10/04/2018 03/05/2018 2.3 0 04/09/2018 18/09/2018 2.9 26/07/2019 23/08/2019 28 20/06/2017 11/07/2017 2.1 10/04/2018 27/04/2018 17 0 04/09/2018 03/10/2018 3.9 29/07/2019 13/08/2019 15 06/07/2017 2.1 15/04/2018 15/05/2018 3.0 1 14/09/2018 23/10/2018 13 31/07/2019 15/08/2019 15 18/07/2017 2.9 19/04/2018 00/5/2018 19 0 06/10/2018 30/10/2018 2.0 03/08/2019 27/08/2019 24 28/07/2017 16/08/2017 17 20/04/2018 09/05/2018 11/10/2018 31/10/2018 17 30/08/2019 04/10/2019 31 31 30/07/2019 14/10/2019 11/11/2019 31 30/08/2019 01/11/2019 31 30/08/2019 11/11/2019 31 30/08/2019 11/11/2019 31 30/08/2019 11/11/2019 31			23			16				16			31
12/02/2017 10/03/2017 2.6 10/04/2018 03/05/2018 2.3 04/09/2018 18/09/2018 2.9 2.6/07/2019 2.3/08/2019 2.8 20/06/2017 11/07/2017 2.1 10/04/2018 27/04/2018 1.7 04/09/2018 03/10/2018 3.9 29/07/2019 13/08/2019 15 06/07/2017 2.1 15/04/2018 15/05/2018 3.0 14/09/2018 23/10/2018 1.3 31/07/2019 15/08/2019 15 18/07/2017 2.9 19/04/2018 00/5/2018 2.9 28/09/2018 31/10/2018 2.0 03/08/2019 27/08/2019 2.4 28/07/2017 2.6 20/04/2018 09/05/2018 2.9 09/10/2018 30/10/2018 2.0 03/08/2019 04/10/2019 3.5 31/07/2017 1.6 20/04/2018 09/05/2018 1.9 1.1/10/2018 31/10/2018 1.7 30/08/2019 04/10/2019 3.5 31/07/2017 1.8 25/04/2018 11/06/2018 1.1/10/2018 31/10/2018 1.7	09/02/2017	01/03/2017	20	09/04/2018	15/05/2018	36		01/09/2018	17/09/2018	14	25/07/2019	22/08/2019	28
20/06/2017 11/07/2017 21 10/04/2018 27/04/2018 17 0 4/09/2018 03/10/2018 39 29/07/2019 13/08/2019 15 06/07/2017 27/07/2017 21 15/04/2018 15/05/2018 30 1 4/09/2018 23/10/2018 13 31/07/2019 15/08/2019 15 18/07/2017 14/08/2017 27 15/04/2018 10/05/2018 25 2 8/09/2018 11/10/2018 24 31/07/2019 15/08/2019 15 19/07/2017 17/08/2017 29 19/04/2018 08/05/2018 19 0 6/10/2018 30/10/2018 20 03/08/2019 2/08/2019 2/4 28/07/2017 23/08/2017 17 20/04/2018 09/05/2018 19 1 1/10/2018 31/10/2018 17 30/08/2019 0/1/12/19 34 21/09/2017 18/08/2017 18 25/04/2018 11/06/2018 53 1 3/10/2018 0/11/2018 31 0/11/2018 31 0/11/2018 31 0/11/2018 31 0/11/2018 31	12/02/2017	10/03/2017	26	10/04/2018	03/05/2018	23		04/09/2018		29		23/08/2019	28
18/07/2017 14/08/2017 27 15/04/2018 10/05/2018 25 2 28/09/2018 11/10/2018 24 31/07/2019 15/08/2019 24 19/07/2017 17/08/2017 29 19/04/2018 08/05/2018 19 06/10/2018 30/10/2018 20 03/08/2019 27/08/2019 24 28/07/2017 23/08/2017 26 20/04/2018 17/05/2018 27 09/10/2018 29/10/2018 20 03/08/2019 06/09/2019 17 30/07/2017 16/08/2017 17 20/04/2018 17/05/2018 17 13/10/2018 31/10/2018 31/10/2018 11 11/11/2019 31/11/2019 04/10/2019 11/11/2019 31 31/07/2017 18 25/04/2018 11/06/2018 47 13/10/2018 30/10/2018 11 11/11/2019 31 21 13/10/2019 11/11/2018 31 09/10/2019 31/11/2019 31 21 20/05/2018 13 14/10/2018 14/11/2018 14 17/10/2019 25/11/2019 31	20/06/2017	11/07/2017	21		27/04/2018	17		04/09/2018	03/10/2018	39			15
18/07/2017 14/08/2017 2.7 15/04/2018 10/05/2018 2.8 2.8/09/2018 11/10/2018 2.4 31/07/2019 15/08/2019 2.4 19/07/2017 17/08/2017 2.9 19/04/2018 08/05/2018 19 0.6/10/2018 30/10/2018 2.0 0.3/08/2019 27/08/2019 2.4 28/07/2017 23/08/2017 2.6 20/04/2018 17/05/2018 2.7 0.9/10/2018 29/10/2018 2.0 0.3/08/2019 0.6/09/2019 1.7 30/07/2017 16/08/2017 1.7 20/04/2018 17/05/2018 1.7 1.3/10/2018 31/10/2018 31/10/2018 1.9 0.9/10/2018 31/10/2018 1.9 0.9/10/2018 31/10/2018 1.1 1.1 31/10/2018 1.1 1.1 1.1 1.1 0.0 </td <td>06/07/2017</td> <td></td> <td>21</td> <td></td> <td></td> <td>30</td> <td></td> <td></td> <td></td> <td>13</td> <td></td> <td></td> <td>15</td>	06/07/2017		21			30				13			15
19/07/2017 17/08/2017 2.9 19/04/2018 08/05/2018 19 0 06/10/2018 30/10/2018 2.0 03/08/2019 27/08/2019 2.4 28/07/2017 23/08/2017 2.6 20/04/2018 17/05/2018 2.7 0 09/10/2018 2.0 20/08/2019 06/09/2019 1.7 30/07/2017 16/08/2017 1.7 20/04/2018 09/05/2018 1.9 1.1/10/2018 31/07/2018 1.9 08/10/2018 1.9 06/09/2019 1.7 30/07/2017 1.8 25/04/2018 11/06/2018 4.7 1.3/10/2018 30/10/2018 1.9 08/10/2019 1.1/1/2019 3.4 21/09/2017 0.510/2017 1.4 26/04/2018 1.8/06/2018 5.3 1.3/10/2018 0.1/1.1/2018 3.1 0.1/1/2018 3.1 0.1/1/2018 3.1 0.1/1/2018 3.1 0.1/1/2018 3.1 0.1/1/2018 3.1 0.1/1/2018 3.1 0.1/1/2018 3.1 0.1/1/2019 2.1/1/2019 1.1/1/2019 1.1/1/2019 1.1/1/2019	18/07/2017	14/08/2017	27	15/04/2018	10/05/2018	25		28/09/2018	11/10/2018	24	31/07/2019	15/08/2019	15
28/07/2017 $23/08/2017$ 26 $20/04/2018$ $17/05/2018$ 27 1 $09/10/2018$ $29/10/2018$ 20 $20/08/2019$ $06/09/2019$ 17 $30/07/2017$ $16/08/2017$ 17 $20/04/2018$ $09/05/2018$ 19 $11/10/2018$ $31/10/2018$ 17 $30/08/2019$ $04/10/2019$ 35 $31/07/2017$ $18/08/2017$ 18 $25/04/2018$ $11/06/2018$ 47 $13/10/2018$ $30/10/2018$ 19 $08/10/2019$ $11/11/2019$ 34 $21/09/2017$ $05/10/2017$ 14 $26/04/2018$ $18/06/2018$ 53 $13/10/2018$ $01/11/2018$ 31 $09/10/2019$ $01/11/2019$ $01/11/2019$ $25/11/2019$ 39 $25/09/2017$ $23/10/2017$ 28 $27/04/2018$ $10/05/2018$ 13 $14/10/2018$ $14/11/2018$ 14 $17/10/2019$ $25/11/2019$ 39 $10/10/2017$ $31/10/2017$ 21 $02/05/2018$ $22/05/2018$ 20 $15/10/2018$ $29/10/2018$ 24 $05/11/2019$ $15/11/2019$ 10 $21/10/2017$ $06/11/2017$ 16 $05/05/2018$ $25/05/2018$ 20 $15/10/2018$ $08/11/2018$ 24 $06/11/2019$ $27/11/2019$ 16 $22/11/2017$ $08/11/2017$ $29/11/2017$ 16 $17/05/2018$ $12/06/2018$ 22 $06/11/2018$ $26/11/2018$ 20 $11/11/2019$ $17/12/2019$ $17/12/2019$ $17/12/2019$ $17/12/2019$ $17/12/2019$ $17/12/2019$ $17/12/2019$ $17/12/2019$ <			29			19				20			24
30/07/2017 16/08/2017 17 20/04/2018 09/05/2018 19 11/10/2018 31/10/2018 17 30/08/2019 04/10/2019 35 31/07/2017 18/08/2017 18 25/04/2018 11/06/2018 47 1 3/10/2018 30/10/2018 19 08/10/2019 11/11/2019 34 21/09/2017 05/10/2017 14 26/04/2018 18/06/2018 53 1 31/10/2018 01/11/2018 31 09/10/2019 01/11/2019 23 25/09/2017 23/10/2017 28 27/04/2018 10/05/2018 13 1 14/10/2018 14/11/2018 14 17/10/2019 25/11/2019 39 10/10/2017 31/10/2017 21 02/05/2018 22/05/2018 20 1 51/10/2018 29/10/2018 24 05/11/2019 17/11/2019 21 08/11/2017 06/11/2017 16 05/05/2018 25/05/2018 22 30/01/2018 23/11/2018 20 16/11/2019 04/12/2019 17/12/2019 18	28/07/2017	23/08/2017	26			27			29/10/2018	20	20/08/2019	06/09/2019	17
31/07/2017 18/08/2017 18 25/04/2018 11/06/2018 47 1 13/10/2018 30/10/2018 19 08/10/2019 11/11/2019 34 21/09/2017 05/10/2017 14 26/04/2018 18/06/2018 53 1 31/0/2018 01/11/2018 31 09/10/2019 01/11/2019 23 25/09/2017 23/10/2017 28 27/04/2018 10/05/2018 13 1 14/10/2018 14/11/2018 14 17/10/2019 25/11/2019 39 10/10/2017 31/10/2017 16 05/05/2018 22/05/2018 20 15/10/2018 29/10/2018 24 05/11/2019 10 21/10/2017 06/11/2017 16 05/05/2018 25/05/2018 20 15/10/2018 08/11/2018 24 06/11/2019 27/11/2019 21 08/11/2017 29/11/2017 16 17/05/2018 30/05/2018 22 30/06/2018 26/11/2018 20 16/11/2019 17/12/2019 16 22/11/2017 18/12/2017 1	30/07/2017			20/04/2018									
21/09/2017 05/10/2017 14 26/04/2018 18/06/2018 53 13/10/2018 01/11/2018 31 09/10/2019 01/11/2019 23 25/09/2017 23/10/2017 28 27/04/2018 10/05/2018 13 14/10/2018 14/11/2018 14 17/10/2019 25/11/2019 39 10/10/2017 31/10/2017 21 02/05/2018 22/05/2018 20 15/10/2018 29/10/2018 24 05/11/2019 15/11/2019 10 21/10/2017 06/11/2017 16 05/05/2018 25/05/2018 20 15/10/2018 08/11/2018 24 06/11/2019 27/11/2019 21 08/11/2017 06/11/2017 16 05/05/2018 25/05/2018 22 30/10/2018 23/11/2018 20 16/11/2019 04/12/2019 18 22/11/2017 18/12/2017 21 08/05/2018 22 06/11/2018 26/11/2018 20 21/11/2019 17/12/2019 16 22/11/2017 08/12/2017 16 17/05/2018 12/06/201													
25/09/2017 23/10/2017 28 27/04/2018 10/05/2018 13 1 14/10/2018 14/11/2018 14 17/10/2019 25/11/2019 39 10/10/2017 31/10/2017 21 02/05/2018 22/05/2018 20 15/10/2018 29/10/2018 24 05/11/2019 15/11/2019 10 21/10/2017 06/11/2017 16 05/05/2018 25/05/2018 20 15/10/2018 08/11/2018 24 06/11/2019 27/11/2019 21 08/11/2017 06/11/2017 16 05/05/2018 30/05/2018 22 30/10/2018 23/11/2018 20 16/11/2019 04/12/2019 18 22/11/2017 18/12/2017 26 15/05/2018 12/06/2018 28 06/11/2018 26/11/2018 20 21/11/2019 17/12/2019 16 22/11/2017 18/12/2017 16 17/05/2018 12/06/2018 22 09/11/2018 26/11/2018 19 07/12/2019 17/12/2019 16 30/11/2017 12/01/2018 43	21/09/2017	05/10/2017	14	26/04/2018	18/06/2018	53			01/11/2018	31		01/11/2019	23
10/10/2017 31/10/2017 21 02/05/2018 22/05/2018 20 1 15/10/2018 29/10/2018 24 05/11/2019 15/11/2019 10 21/10/2017 06/11/2017 16 05/05/2018 25/05/2018 20 1 15/10/2018 08/11/2018 24 06/11/2019 27/11/2019 21 08/11/2017 29/11/2017 21 08/05/2018 30/05/2018 22 30/10/2018 23/11/2018 20 16/11/2019 04/12/2019 18 22/11/2017 18/12/2017 26 15/05/2018 12/06/2018 28 06/11/2018 26/11/2018 20 21/11/2019 17/12/2019 26 22/11/2017 08/12/2017 16 17/05/2018 12/06/2018 26 06/11/2018 26/11/2018 19 07/12/2019 17/01/2020 41 30/11/2017 12/01/2018 43 17/05/2018 08/06/2018 22 09/11/2018 28/11/2018 19 07/12/2019 17/01/2020 24 07/12/2017 28/12/2017		23/10/2017	28					14/10/2018					
21/10/2017 06/11/2017 16 05/05/2018 25/05/2018 20 1 15/10/2018 08/11/2018 24 06/11/2019 27/11/2019 21 08/11/2017 29/11/2017 21 08/05/2018 30/05/2018 22 30/10/2018 23/11/2018 20 16/11/2019 04/12/2019 18 22/11/2017 18/12/2017 26 15/05/2018 12/06/2018 28 06/11/2018 26/11/2018 20 21/11/2019 17/12/2019 26 22/11/2017 08/12/2017 16 17/05/2018 12/06/2018 26 06/11/2018 26/11/2018 19 07/12/2019 17/01/2020 41 30/11/2017 12/01/2018 43 17/05/2018 12/06/2018 22 09/11/2018 28/11/2018 24 09/12/2019 27/12/2019 18 07/12/2017 12/01/2018 43 17/05/2018 08/06/2018 22 09/11/2018 28/11/2018 22 16/12/2019 09/01/2020 24 07/12/2017 28/12/2017 21			21	02/05/2018							05/11/2019		
08/11/2017 29/11/2017 21 08/05/2018 30/05/2018 22 1 30/10/2018 23/11/2018 20 16/11/2019 04/12/2019 18 22/11/2017 18/12/2017 26 15/05/2018 12/06/2018 28 06/11/2018 26/11/2018 20 21/11/2019 17/12/2019 26 22/11/2017 08/12/2017 16 17/05/2018 12/06/2018 26 06/11/2018 26/11/2018 19 07/12/2019 17/01/2020 41 30/11/2017 08/12/2017 16 17/05/2018 08/06/2018 22 09/11/2018 28/11/2018 19 07/12/2019 17/01/2020 41 30/11/2017 12/01/2018 43 17/05/2018 08/06/2018 22 09/11/2018 28/11/2018 24 09/12/2019 27/12/2019 18 07/12/2017 28/12/2017 21 01/06/2018 27/06/2018 13 2 21/12/2018 14/12/2018 26 19/12/2019 09/01/2020 24 07/12/2017 10/01/2018			16			20				24			21
22/11/2017 18/12/2017 26 15/05/2018 12/06/2018 28 2 06/11/2018 26/11/2018 20 21/11/2019 17/12/2019 26 22/11/2017 08/12/2017 16 17/05/2018 12/06/2018 26 06/11/2018 26/11/2018 19 07/12/2019 17/01/2020 41 30/11/2017 12/01/2018 43 17/05/2018 08/06/2018 22 09/11/2018 28/11/2018 24 09/12/2019 27/12/2019 18 07/12/2017 28/12/2017 21 01/06/2018 27/06/2018 26 11/11/2018 05/12/2018 22 16/12/2019 09/01/2020 24 07/12/2017 10/01/2018 34 14/06/2018 27/06/2018 13 2 22/11/2018 14/12/2018 26 19/12/2019 09/01/2020 21 13/12/2017 10/01/2018 34 14/06/2018 27/06/2018 13 2 25/11/2018 14/12/2018 26 19/12/2019 09/01/2020 21 13/12/2017			21			22				20			18
22/11/2017 08/12/2017 16 17/05/2018 12/06/2018 26 1 06/11/2018 26/11/2018 19 07/12/2019 17/01/2020 41 30/11/2017 12/01/2018 43 17/05/2018 08/06/2018 22 09/11/2018 28/11/2018 24 09/12/2019 27/12/2019 18 07/12/2017 28/12/2017 21 01/06/2018 27/06/2018 26 11/11/2018 05/12/2018 22 16/12/2019 09/01/2020 24 07/12/2017 28/12/2017 21 01/06/2018 27/06/2018 13 2 22/11/2018 05/12/2018 22 16/12/2019 09/01/2020 24 07/12/2017 10/01/2018 34 14/06/2018 27/06/2018 13 2 22/11/2018 14/12/2018 26 19/12/2019 09/01/2020 21 13/12/2017 27/12/2017 14 18/06/2018 04/07/2018 16 2 25/11/2018 18/12/2018 20 23/12/2019 17/01/2020 25 19/12/201													
30/11/2017 12/01/2018 43 17/05/2018 08/06/2018 22 4 09/11/2018 24 09/12/2019 27/12/2019 18 07/12/2017 28/12/2017 21 01/06/2018 27/06/2018 26 11/11/2018 05/12/2018 22 16/12/2019 09/01/2020 24 07/12/2017 10/01/2018 34 14/06/2018 27/06/2018 13 2 22/11/2018 14/12/2018 26 19/12/2019 09/01/2020 21 13/12/2017 27/12/2017 14 18/06/2018 04/07/2018 16 2 25/11/2018 21/12/2018 20 23/12/2019 17/01/2020 25 19/12/2017 11/01/2018 23 18/06/2018 02/07/2018 14 2 8/11/2018 11/12/2018 10 27/12/2019 16/01/2020 25 19/12/2017 11/01/2018 23 18/06/2018 02/07/2018 14 2 8/11/2018 18/12/2018 11 27/12/2019 16/01/2020 20													
07/12/2017 28/12/2017 21 01/06/2018 27/06/2018 26 11/11/2018 05/12/2018 22 16/12/2019 09/01/2020 24 07/12/2017 10/01/2018 34 14/06/2018 27/06/2018 13 2 22/11/2018 14/12/2018 26 19/12/2019 09/01/2020 21 13/12/2017 27/12/2017 14 18/06/2018 04/07/2018 16 2 25/11/2018 21/12/2018 20 23/12/2019 17/01/2020 25 19/12/2017 11/01/2018 23 18/06/2018 02/07/2018 14 2 28/11/2018 18/12/2018 11 27/12/2019 16/01/2020 20													
07/12/2017 10/01/2018 34 14/06/2018 27/06/2018 13 2 22/11/2018 14/12/2018 26 19/12/2019 09/01/2020 21 13/12/2017 27/12/2017 14 18/06/2018 04/07/2018 16 25/11/2018 21/12/2018 20 23/12/2019 17/01/2020 25 19/12/2017 11/01/2018 23 18/06/2018 02/07/2018 14 28/11/2018 18/12/2018 11 27/12/2019 16/01/2020 20													
13/12/2017 27/12/2017 14 18/06/2018 04/07/2018 16 2 25/11/2018 21/12/2018 20 23/12/2019 17/01/2020 25 19/12/2017 11/01/2018 23 18/06/2018 02/07/2018 14 28/11/2018 18/12/2018 11 27/12/2019 16/01/2020 20							-						
19/12/2017 11/01/2018 23 18/06/2018 02/07/2018 14 28/11/2018 18/12/2018 11 27/12/2019 16/01/2020 20							-						
22/12/2017 12/01/2018 21 20/06/2018 11/07/2018 21 09/12/2018 20/12/2018 22 28/12/2019 15/01/2020 18	22/12/2017	12/01/2018	21	20/06/2018	11/07/2018	21		09/12/2018	20/12/2018	22	28/12/2019	15/01/2020	18

Figure 97: Obituaries relating to funerals at the Surrey & Sussex Crematorium

- 11.15 These data suggest average delays of over three weeks between death and funeral, with an average of 44% of funerals delayed even longer. Such delays will inevitably increase in line with projected increases in deaths, with consequent increases in the practical capacity usage levels at existing crematoria. It is clear that, for large parts of the year bereaved people face unacceptable delays when arranging a funeral at the Surrey and Sussex Crematorium. This is further evidence of the qualitative need for the proposed Turners Hill Crematorium.
- 11.16 In the sample of obituaries, March represents too small a sample size to be fully representative. The relatively long delays in April and August may be a consequence of Bank Holidays affecting the process of registering deaths, and in the case of April an accumulating back-log. The July/August position may also reflect a preference to wait a little longer on the basis some mourners may be away on holiday. The obituaries from January and February reflect seasonal increases.
- 11.17 It is highly relevant to note Dignity's view on the significance of delays between death and funeral, as presented in a Proof of Evidence [CD 11.16] at the Essington Planning Appeal [CD 12.5]:

6.12 Generally, Dignity considers 7 days from the date of death to the date of cremation to be an optimum period and regards up to 14 days as being a reasonable period. This takes into account the various administrative arrangements that must be attended to in the period immediately following a death and before a funeral can be carried out. I note that this 14 day period has been applied in some appeal decisions too.

6.13 Dignity has made repeated requests of WCC for cremation data in relation to Bushbury, but it has refused to release it to us. I note that WCC refused to disclose the information sought because it considered that to do so would adversely affect the legitimate economic interest of WCC and would put the viability of Bushbury at threat.

6.16 The above data shows that the waiting time between death and cremation at Bushbury is significantly in excess of 14 days (shown as red line) across the whole of 2017. Moreover, waiting times increase even further – to over 23 days (i.e. in excess of 3 weeks) throughout 2017, with a peak of over 25 days in January 2017.

6.17 Our further analysis from the obituary notices also shows that a total of 1,096 services conducted at Bushbury experienced waiting times of over 14 days. This equates to over 93% of the cremations that we analysed in obituary notices at Bushbury in 2017. 6.18 Further analysis undertaken by Dignity, based upon data from its Telford Crematorium and from Jennings Funeral Directors, shows the following average period between date of death and date of cremation in the area in 2017:

(a) Bushbury Crematorium - 23 days (obituary notices)

(b) Telford Crematorium – 20 days

(c) Jennings Funeral Directors (all services in Wolverhampton area) – 22 days 6.19 This shows that, on average, people using Bushbury experience longer delays than users of Telford Crematorium and people arranging funerals (through Jennings) elsewhere in the Wolverhampton area. This delay is exacerbated in the peak winter months when people using Bushbury can experience delays of up to 26 days. 6.20 In my experience, this level of delay is both excessive and unacceptable and represents a clear qualitative deficiency in the service being offered at Bushbury. 6.25 The above appeal decision recognised that the provision of a new crematorium would not only increase the qualitative experience of the users of the new facility, but also enhance the qualitative experience of users of the existing facility by decreasing usage and waiting times for cremation services.

6.26 The above evidence clearly indicates a qualitative need for a new crematorium facility at the appeal site: quite apart from providing people with further choice, the Appeal Scheme would provide a much needed qualitative improvement to Bushbury, Gornal Wood and Telford Crematoria and reduce funeral delays in the area.⁴⁰

11.18 Dignity's comments regarding delays at Bushbury Crematorium are directly applicable to their own Surrey and Sussex Crematorium.

⁴⁰LPA Reference Number: 14/00838/FUL Appeal Reference: APP/C3430/W/15/3039163. Proof of Evidence of Alan Lathbury December 2018

11.19 Journey times to crematoria

- 11.20 This report has previously quantified the need for the new Turners Hill Crematorium by reference to journey times, using drive-time catchment mapping software.
- 11.21 Minimising travel time also has qualitative impacts upon the bereaved, Funeral Directors and those officiating at funerals.
- 11.22 There is great variation in the way people arrange funerals, influenced by personal, social, cultural, religious, financial and other factors. The secularisation of society has affected the level of attachment people may have to their local church and many people no longer live within the same communities as previous generations of their families.
- 11.23 However, funerals are still widely regarded as important events requiring the attendance of family, friends and others who knew the person who has died. Statistically, the probability is very high that a funeral will result from the death of someone of senior years, who has spent a lifetime building up a network of contacts, many of whom will be local to where they live and work. It is entirely logical therefore that this group of people would wish to gather together for the funeral in a location that is convenient for most of them. The new Turners Hill Crematorium will benefit a significant population within West Sussex, through its location that is far more convenient for them than other crematoria.
- 11.24 By their nature, funerals are emotional events signifying the end of many different relationships with a single person and a change in the relationships that those still living have with each other. Enduring unnecessarily long journeys, often involving traffic congestion and the challenges of keeping a group of vehicles together, is altogether undesirable for a group of mourners on their way to the crematorium for an emotional life event.

11.25 Congestion at crematoria: the 'conveyor belt' experience

- 11.26 The number and types of vehicles attending funerals at crematoria varies and inevitably there are occasional funerals of some-one who was young and/or particularly well-known where access and parking space is insufficient to cope. However, the more common situation where the site is congested occurs where vehicle numbers per funeral are modest, but there are too many funerals on site at the same time.
- 11.27 This situation arises all too frequently for a number of reasons, the main ones being:
 - A funeral arrives at the crematorium either too early or too late
 - A funeral takes too much or too little time at the crematorium
- 11.28 Funeral Directors take pride in arriving at the correct time at each of the various locations that may be involved in a funeral, including the crematorium. However, there are sometimes factors outside of their control, or which could not reasonably be foreseen, which can advance or delay the time when they arrive at the crematorium gates. A funeral can involve a series of events each involving different people, who can have a cumulative impact upon the schedule of the particular funeral. For example, the funeral service held at the church prior to a committal service at the crematorium can last less or more time than expected, influencing the time of arrival at the crematorium.
- 11.29 If there are other funerals taking place around their particular funeral slot, the arrival of one group of mourners early or late can easily result in vehicles and mourners from different funerals becoming mixed up. This is particularly prevalent at crematoria such as the Surrey and Sussex Crematorium, Woodvale, The Downs and the Kent and Sussex Crematorium, where there is a choice of funeral service chapel.

- 11.30 If a funeral service at the crematorium lasts longer than allowed for within the service slot, the mourners leave the chapel late. Where there is a funeral immediately following theirs, which is a common situation, that group of mourners will have had difficulty finding somewhere to park their cars, as the car park is still occupied by the cars belonging to mourners of the overrunning funeral. They will then have to queue up outside the chapel entrance waiting for their funeral service to start late because the other group of mourners are still inside the chapel.
- 11.31 This situation can easily have a knock-on effect on all of the subsequent funerals in the day at a busy crematorium. It can be quite common for funerals to be running behind schedule and for there to be a tangible atmosphere of congestion and tension after a morning funeral falls out of match with the schedule.
- 11.32 This all too easily has a qualitative impact upon the experience of bereaved people. Similarly, Funeral Directors delayed by one funeral face challenges in minimising the impact that this has on their ability to undertake the other funerals they have arranged for the same day.
- 11.33 In the Camborne Appeal Decision⁴¹ [CD 12.7], the Inspector Mike Robins stated:
- 11.34 34. Although I have considered the theoretical capacity of Penmount under quantitative need, I turn now to the quality of the funeral experience it can provide. I had the opportunity to visit Penmount at a time when three consecutive funerals were taking place in each chapel. There is no question that the setting is exceptional and no evidence is before me to suggest that the management and staff are anything less than highly professional in the service they provide. However, accepting that this was only a snapshot, the site at the time of my visit was busy with a large number of cars parked around the chapels and a lot of people moving around the immediate area.

⁴¹ Appeal Ref. APP/D0840/A/09/2098108 Land at Race Farm, Puggis Hill, Treswithian, Camborne, Cornwall

- 11.35 The essence of a funeral is that it is centred upon a unique individual and the distinct group of people that were familiar enough with that person to attend their funeral. This uniqueness is fatally compromised by congestion and delay, or rush, at the crematorium and the sense that one is simply travelling on a 'conveyor-belt' through the crematorium funeral experience.
- 11.36 In my experience, Funeral Directors not only prefer to book a funeral service at a crematorium at a core time, but also ideally without another funeral immediately preceding or following theirs. This is unlikely to happen at a busy crematorium. This was partially achievable every day at Wrexham Crematorium as the gap in funerals at lunch time meant the last slot of the morning did not have a funeral immediately afterwards and the first slot of the afternoon did not have a funeral immediately before it. These slots gave more privacy for the mourners. In addition, in the mind of the Funeral Director the last slot of the morning provided leeway for the service to overrun its allocated time if the minister or family gave a long eulogy.
- 11.37 A report [CD 11.7] 'Cost, quality seclusion and time: What do UK customers want from a cremation funeral?', published by Trajectory in 2018, provides helpful information when considering qualitative aspects of crematoria provision. It refers to the customers' perception of the 'conveyor-belt' experience and Professor Douglas Davies is quoted at the beginning of the report:
- 11.38 At a time of unprecedented choice over many aspects of life this important research clearly maps many contemporary attitudes to funerals. In pinpointing the image of the 'conveyor belt' as a popular expression of how mourners can feel too processed at crematoria it brings statistical weight to my own observations of some thirty years ago that is was not actual machinery but that sense of being processed that made many unhappy.
- 11.39 The report highlights sufficient service interval length as being of key importance and how this directly links with the 'conveyor-belt' feeling, generated by seeing mourners from other funerals.

- 11.40 The focus groups emphatically suggested that privacy was of the utmost importance. People want to be able to remember their loved one in their chosen way without interruption. It emerged that time and slot length were crucial to this because seeing mourners from other funeral services was particularly unwelcome and intrusive. These findings were borne out by the quantitative research... A clear majority of people agree both that 30 minutes is not long enough for a cremation service (59%), and that services should last at least 45 minutes (also 59%). The more general question, that does not focus on specific slot lengths in minutes but emphasises the importance of not seeing mourners from earlier or later services received even more support with almost four out of five (78%) agreeing with the statement...This all points to the importance of slot length and not feeling rushed. However, ... it is seeing other mourners that contributes most to the perception of being on a conveyor belt. This question was only asked of those people who said that they'd had a conveyor belt experience. Of course, there is also a link between overall slot length and not seeing other mourners. The longer the slot length the greater chance that people can have the length and type of service they want. For most people this would involve a length of slot that allows a period of time either side of the actual service so that they can pay their respects, speak to friends and relatives (who may often not have seen each other for a long time) and still not encounter other mourners.
- 11.41 The research found that 90% of Funeral Directors and 78% of customers agreed with the statement:
- 11.42 There should be sufficient time between services so that you do not see mourners from the previous or following service.
- 11.43 The research identifies a core set of six customer needs from a cremation funeral:
- Making sure that all the people who want to attend can attend
- Finding a convenient slot

- Not seeing other mourners enough time in the chapel and a period of time around the service
- Keeping the absolute cost within budget
- Value aside from cost, making sure that the service delivers the desired experience in terms of having sufficient time to remember their loved one in their way
- Personalisation
- 11.44 The report's Executive Summary emphasizes the importance that customers place on having sufficient time at the crematorium:
- 11.45 Ultimately, having enough time at the crematorium is more important to most people than the cost. The cost of a cremation had little impact on perception of value.
- 11.46 At a twin chapel crematorium, working at over 80% of core capacity during peak months, it is extremely unlikely that that these six identified needs can be met.
- 11.47 The new Turners Hill Crematorium will offer 60-minute funeral intervals. Even if all six core slots in a day were booked, this generous interval time will minimise the possibility of congestion occurring, particularly as there is only a single chapel and sufficient visitor car parking spaces carefully planned.
- 11.48 People will be able to arrive, park, enter the building, experience the funeral and leave the site with a sense that they are the only people on site and the only funeral that day. This will have a memorable impact upon their experience of the death of the person they knew.
- 11.49 6.30 Unlike Bushbury, the Appeal Scheme would be a single chapel crematorium. This, in combination with a longer (1 hour) service time, would avoid any issues associated with having two cremation services on site at the same time.⁴²

⁴² LPA Reference Number: 14/00838/FUL Appeal Reference: APP/C3430/W/15/3039163. Proof of Evidence of Alan Lathbury December 2018

11.50 Meeting the needs of the present and future generations

- 11.51 This report seeks to avoid criticism of the existing crematoria serving the area and, in particular, any criticism of the people owning, operating or working at them. In all cases, the facilities have been renovated and improved several times since being built. However, all of these buildings and sites are in one way or another compromised when it comes to meeting the requirements of the 21st century, as they were designed and built in a different age, when there was significantly less demand for cremation.
 - Surrey and Sussex Crematorium, Crawley was built in 1956.
 - Woodvale Crematorium, Brighton is located within a Victorian cemetery opened in 1856. The crematorium was developed in 1930 from the conversion of the existing twin cemetery chapels, one Anglican and the other Nonconformist. As a result, the crematorium's North Chapel remains consecrated and has strong ecclesiastical imagery. The Extra-Mural Cemetery Chapel was built in 1851 and is Grade 2 Listed
 - The Downs Crematorium, Brighton was built in 1941 and is located in a cemetery opened in 1886.
 - Kent and Sussex Crematorium, Tunbridge Wells was built in 1958 and is located in a cemetery opened in 1886.
- 11.52 They vary in design, but to one degree or another all reflect the design of English ecclesiastical buildings, as can be seen in the photographs below. In particular, Woodvale's three chapels and the Cemetery Chapel at the Kent and Sussex Crematorium are modelled like churches.

Surrey & Sussex Crematorium



St Richards Chapel

Memorial (St Michaels) Chapel

Woodvale Crematorium



North Chapel

Woodvale Crematorium



South Chapel



Extra Mural Chapel

Peter Mitchell Associates. April 2021 Page 146 of 162

The Downs Crematorium



Main Chapel



Family Chapel

Kent and Sussex Crematorium



Crematorium Chapel



Cemetery Chapel

Peter Mitchell Associates. April 2021 Page 148 of 162

11.53 In contrast, the photographs below illustrate examples of contemporary designs of UK crematoria chapels.





Babworth Crematorium



Note: the wooden cross behind the lectern is readily removable.

Great Glen Crematorium



Note: the wooden cross behind the lectern is readily removable.

Chilterns Crematorium



- 11.54 The proposed Turners Hill Crematorium will be built to a contemporary design, without reflecting any particular religion, informed by the experience of the past and present. It will be able to provide a much higher quality environment for bereaved people, Funeral Directors and other users than is possible at established crematoria designed for the last century.
- 11.55 The evidence from published obituaries of deaths in early 2019 demonstrates an average three-week wait for a funeral. The availability of preferred slots at crematoria is a key factor contributing to these delays, which will extend further with projected increases in numbers of deaths. The new Turners Hill Crematorium will significantly improve the availability of core funeral service times for local people.
- 11.56 The evidence from drive-time catchment analysis quantifies the significant numbers of local people who will benefit from shorter funeral journey times to the new Turners Hill Crematorium, as compared to existing crematoria.
- 11.57 In the Camborne Appeal Decision⁴³ [CD 12 7], the Inspector Mike Robins stated:
- 11.58 38. I place significant weight on the needs of the bereaved and conclude that the proposed crematorium would result in benefits not only in terms of the times involved in travelling to and from funerals, but also in provision of appropriate timescales for funerals to take place and potentially the experience on-site which may currently be under pressure at the busiest times of year. These benefits would accrue not only to those who would be served by the proposed crematorium, but to a wider population now served by Penmount.
- 11.59 The new Turners Hill Crematorium will offer contemporary design and facilities that will provide an attractive venue in which people can congregate and celebrate the lives of their loved ones with a sense of space and privacy.

Peter Mitchell Associates. April 2021 Page 153 of 162

⁴³ Appeal Ref. APP/D0840/A/09/2098108 Land at Race Farm, Puggis Hill, Treswithian, Camborne, Cornwall

- 11.60 At the Beetham Hall Appeal⁴⁴ [CD 12.22], the Inspector M Seaton stated:
- 31. My attention has not been drawn to any recent provision of new crematoria or 11.61 an increase in available capacity within the area. I have noted the contention of interested parties in respect of existing crematoria not operating at full capacity, but accept the appellant's point that the notion of 100% operation at crematoria would be theoretical due to the technical limitations of equipment and the unpopularity of certain slots during the day. Whilst I have also considered the interested parties point as to whether convenience for users and accessibility should translate into need, I am satisfied that need must realistically comprise both quantitative and qualitative elements. In this respect, the desirability of reducing the need to travel, coupled with the current indicative capacity and delays experienced at existing crematoria as well as demographic trends showing the District to have an ageing population, demonstrates to my satisfaction that on the balance of the evidence before me that there is a need for additional crematorium facilities in the district. I note that the Council's Delivery Plan has indicated the historic difficulties of establishing an appropriate site for a crematorium, and I therefore would conclude that addressing this identified need would clearly be in the public benefit, and would add substantial weight in support of the proposals.

11.62 There is a compelling qualitative need for the new Turners Hill Crematorium.

⁴⁴ Appeal Ref: APP/M0933/W/15/3003034 Fishwicks Ltd. Beetham Hall, Beetham, Milnthorpe LA7 7BQ

Appendix 1: [CD 7.3b] Site constraints at the Surrey and Sussex Crematorium

Separate attachment due to file size limits

Appendix 2: ONS 2018-based SNPP Population Variants

	High Internatio	nal Migration Va	iriant	
0	Projected F	Population	Projected C	hange
Area	2020	2043	2020 to 2	2043
Crawley	113,627	125,419	11,792	10.4%
Horsham	145,299	174,963	29,664	20.4%
Lewes	103,954	118,167	14,213	13.7%
Mid Sussex	151,847	173,298	21,451	14.1%
Mole Valley	87,133	91,713	4,580	5.3%
Sevenoaks	121,456	135,420	13,964	11.5%
Tandridge	88,313	97,977	9,664	1 0.9%
Wealden	162,489	184,837	22,348	13.8%
Subtotals	974,118	1,101,794	127,676	13.1%
England	56,718,710	64,241,728	7,523,018	13.3%
	Low Internation	nal Migration Va	riant	
Area	Projected F	Population	Projected C	hange
Alea	2020	2043	2020 to 2	043
Crawley	113,435	113,829	394	0.3%
Horsham	145,201	163,988	18,787	12.9%
Lewes	103,895	110,942	7,047	6.8%
Mid Sussex	151,724	161,123	9,399	6.2%
Mole Valley	87,056	84,752	(2,304)	- 2.6%
Sevenoaks	121,374	126,159	4,785	3.9%
Tandridge	88,257	91,149	2,892	3.3%
Wealden	162,405	175,087	12,682	7.8%
Subtotals	973,347	1,027,029	53,682	5.5%
England	56,638,211	59,245,369	2,607,158	4.6%
4	Alternative Interr	nal Migration Pro	jection	
Area	Projected F	Population	Projected C	hange
	2020	2043	2020 to 2	2043
Crawley	113,402	118,907	5,505	4.9%
Horsham	145,061	167,730	22,669	15.6%
Lewes	103,927	115,373	11,446	11.0%
Mid Sussex	152,025	169,666	17,641	11.6%
Mole Valley	87,196	89,228	2,032	2.3%
Sevenoaks	121,327	131,227	9,900	8.2%
Tandridge	88,402	95,989	7,587	8.6%
Wealden	162,909	184,328	21,419	13.1%
Subtotals	974,249	1,072,448	98,199	10.1%
England	56,678,470	61,744,098	5,065,628	8.9%

Figure 98: ONS 2018-based SNPP variant projections for population of all ages

	High Ir	nternationa	al Migration V	/ariant
Area	2020	2043	Change 202	0 to 2043
Crawley	762	940	178	23.4%
Horsham	1,400	2,032	632	45.1%
Lewes	1,130	1,503	373	33.0%
Mid Sussex	1,430	1,935	505	35.3%
Mole Valley	893	1,093	200	22.4%
Sevenoaks	1,130	1,378	248	21.9%
Tandridge	857	1,115	258	30.1%
Wealden	1,818	2,458	640	35.2%
Subtotals	9,420	12,454	3,034	32.2%
England	509,540	648,695	139,155	27.3%
Area	Low In	iternationa	l Migration V	ariant
Alea	2020	2043	Change 202	0 to 2043
Crawley	762	918	156	20.5%
Horsham	1,400	2,011	611	43.6%
Lewes	1,130	1,488	358	31.7%
Mid Sussex	1,430	1,912	482	33.7%
Mole Valley	893	1,079	186	20.8%
Sevenoaks	1,130	1,362	232	20.5%
Tandridge	857	1,102	245	28.6%
Wealden	1,818	2,437	619	34.0%
Subtotals	9,420	12,309	2,889	30.7%
England	509,540	648,695	139,155	27.3%
Area	Alterna	ative intern	al migration	variant
	2020	2043	Change 202	0 to 2043
Crawley	760	904	144	18.9%
Horsham	1,402	2,040	638	45.5%
Lewes	1,129	1,483	354	31.4%
Mid Sussex	1,435	1,972	537	37.4%
Mole Valley	896	1,119	223	24.9%
Sevenoaks	1,132	1,401	269	23.8%
Tandridge	859	1,138	279	32.5%
Wealden	1,824	2,547	723	39.6%
Subtotals	9,437	12,604	3,167	33.6%
England	509,540	648,695	139,155	27.3%

Figure 99: ONS 2018-based SNPP variant projections for deaths all ages

Appendix 3: [CD 11.8] Surrey and Sussex Crematorium Price List

Separate attachment due to file size limits

Appendix 4: Survey of Funeral Directors

- Intro. In spite of their workload during the coronavirus pandemic, four out of twenty Funeral Directors invited managed to complete a questionnaire, with the questions and responses shown below.
- Please indicate which of the following locations you currently use for cremation funerals and the approximate proportion of your cremation funerals that you take to each crematorium.

Crematorium	< 25%	25%-50%	50%-75%	75%-100%
Kent and Sussex, Tunbridge Wells	50%	25%		
Surrey & Sussex, Crawley		25%	75%	
The Downs, Brighton	75%			
Wealden, Horam	50%			
Woodvale, Brighton	25%	50%		

2. Typically, how long does it take for your hearse and funeral cortège to drive to each location?

Location	Journey time in minutes				
Location	Up to 15	15 to 30	30 to 45	Over 45	
Kent and Sussex, Tunbridge Wells			75%	25%	
Surrey & Sussex, Crawley		50%	25%		
The Downs, Brighton			50%		
Wealden, Horam			25%	50%	
Woodvale, Brighton			50%		

3. Typically, what proportion of your funerals involve the following arrangements?

Funeral arrangements	< 25%	25%-50%	50%-75%	75%-100%
Hearse and cortège to crematorium		50%	50%	
Hearse only to crematorium		25%	75%	
Direct cremation	100%			

4. There are various factors that influence people's choice of location for a cremation funeral service. In your experience and opinion, what are the most important factors?

	Ranking						
Factor	1 is most important - 5 is least importan						
	1	2	3	4	5		
Proximity / journey time		75%	25%				
Cost	25%		50%				
Availability of preferred date and time		50%	50%				
Duration of funeral service interval		75%	25%				
Quality of service and facilities offered	25%	50%		25%			
Appearance of building and grounds	25%	25%	25%	25%			
Facilities for Funeral Director's staff			50%		50%		
Family's preference	100%						

5. Please indicate which you consider to be the most significant positive aspects of the locations that you use, that you value for both yourself and your clients.

Location	Proximity	Cost	Availability	Service Interval	Services offered	Appearance	Facilities for FDs
Kent and Sussex	25%	25%			25%	25%	25%
Surrey & Sussex	100%	25%	25%	75%	50%	50%	50%
The Downs	50%	50%		25%			
Wealden	25%				25%		25%
Woodvale	50%	50%	25%	50%	25%		

6. There are various factors that combine to influence the length of time between death and funeral. In your experience, what is the average length of time during normal levels of demand and during seasonal peak periods of demand?

Number of deaths	Days between death and funeral						
Number of deaths	10	10 to 15	15 to 20	20 to 25	> 25		
Average / Summer	75%	25%					
Peak / Winter		25%	25%	25%			

7. Do you think that there are enough crematoria in the area to meet the current and foreseeable future needs of bereaved people and Funeral Directors?

Statement	Yes	No
There are enough crematoria in the area to meet current need	50%	50%
When contacting the crematorium to make a booking, a preferred day and time for a funeral is usually readily available	50%	50%
Existing crematoria have sufficient core times available on most days	50%	50%
There are enough crematoria in the area to meet foreseeable future need	25%	75%

8. Do you think that there are enough Green Burial sites in the area to meet current and foreseeable future needs of bereaved people and Funeral Directors?

Statement	Yes	No
There are enough Green Burial sites in the area to meet current need	25%	75%
There are enough Green Burial sites in the area to meet foreseeable future need	25%	75%
The proportion of clients preferring Green Burial is increasing	50%	50%

9. What are your views on the need for, and the benefits of, the development of a new crematorium at Turners Hill?

Statement	Agree	Disagree
A new crematorium is needed at Turners Hill to better serve the needs of people in the area.	50%	50%
A new crematorium at Turners Hill would be well located to meet the needs of Funeral Directors serving the people in the area.	50%	25%
A new crematorium at Turners Hill would reduce funeral journey times for people in the area.	75%	25%
A new crematorium at Turners Hill would provide greater choice and availability of service times to bereaved people and Funeral Directors than is currently available.	100%	0%
Through offering an additional capacity for funerals, a new crematorium at Turners Hill would enable funerals to be arranged more quickly than at present.	25%	75%
60-minute service intervals at a new crematorium at Turners Hill would be a benefit to mourners.	75%	25%
60-minute service intervals at a new crematorium at Turners Hill would be a benefit to Funeral Directors.	50%	50%

10. What are your views on the need for, and the benefits of, the development of a new Green Burial site at Turners Hill?

Statement	Agree	Disagree
A new Green Burial site is needed at Turners Hill to better serve the needs of people in the area.	75%	0%
A new Green Burial site at Turners Hill would be well located to meet the needs of Funeral Directors serving the people in the area.	75%	25%
A new Green Burial site at Turners Hill would reduce funeral journey times for people in the area.	50%	50%
A new Green Burial site at Turners Hill would provide greater choice and availability of service times to bereaved people and Funeral Directors than is currently available.	75%	25%