

EVIDENCE BASE

CHAPTER 2: TERMS OF REFERENCE AND DEMOGRAPHIC PROJECTIONS FOR CORPUSTY & SAXTHORPE

Corpusty and Saxthorpe Neighbourhood Plan Demographic Projections BRIEF FOR Dr Katie Bates, Fellow in Population Studies, Department of Social Policy, The London School of Economics and Political Science

1. Here are the baseline data:

<http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=7&b=6501096&c=Corpusty&d=14&e=62&g=6449517&i=1001x1003x1032x1004&m=0&r=1&s=1414588941398&enc=1&dsFamilyId=2474>

This gives age break down from Census 2011.

Table 1. This table is taken from the survey we did in the village in 2011.

	Q51-56	Q58-63			
Age	Male	Female	Total	Age range midpoint	Total x midpoint
0-10	26	15	41	5	205
11-18	12	16	28	14.5	406
19-35	18	16	34	27	918
36-60	60	68	128	48	6144
61-79	56	52	108	70	7560
80 or over	12	10	22	80	1760
Total	<i>184</i>	<i>177</i>	<i>361</i>	TOTAL	16993
	187	181	368	MEAN AGE	47.07202216

2. Here are some assumptions for the FIRST SET OF PROJECTIONS:

- a. Start from 2011 figures
- b. Natural increase of reproductive age group 19-35 @ 1.92 children – but this is based on national TFR. This may be too big for Corpusty and Saxthorpe, no significant ethnic minority population fraction. However, local knowledge makes it reasonable to assume TFR=1.9.
- c. ON THE BASIS OF THOSE ASSUMPTIONS, CAN YOU MAKE A-G PYRAMIDS AND OUTPUT TABLES FOR 2016, 2021, 2026, 2031, 2036, 2041.

3. This next set of assumptions IS FOR THE SECOND SET OF PROJECTIONS and involves HOUSING STOCK INCREASE:

- a. By 2019 the housing stock will have increased by 30 units of which we may assume:

- i. 25% will be “affordable housing” – thus will be occupied by people in the 19-35 age group of whom 75% will be fertile at 1.9 TFR for this pop fraction
- ii. 75% will be private housing and therefore will be available at private market rates, this 75% of the new stock will attract people in the 36-60 age group and they will have a TFT of 50% of the TFR of the 19-35 age cohort because some will have had children grow up and leave, some will be at the 1.9 level, so use TFR assumption of 0.95 for this group.
- iii. ON THE BASIS OF THOSE ASSUMPTIONS, CAN YOU MAKE Age-Gender PYRAMIDS AND OUTPUT TABLES FOR 2016, 2021, 2026, 2031, 2036, 2041.

Table 2. Outputs

Projections for Corpusty and Saxthorpe Base Data

MALES		2011	2016	2021	2026	2031	2036	2041	2021-2026 change	2026-2031 change	2031-2036 change	2036-2041 change		1.062748	1.030758	0.994597	0.983097	0.991636	0.991636
	0 to 10	20	21.25496	21.90871	21.79035	21.42203	21.24285	21.06518	99.45974	98.3097	99.1636	99.1636		1.062748	1.030758	0.994597	0.983097	0.991636	0.991636
	11 to 18	12	10.64645	11.01014	11.88779	12.07514	12.03414	11.99328	107.9713	101.576	99.66046	99.66046							
	19 to 35	18	18.35672	17.83443	17.1773	17.20803	17.64975	18.10281	96.31543	100.1789	102.567	102.567							
	36 to 60	60	58.29041	57.84237	56.99192	56.23088	56.7061	57.18534	98.52971	98.66466	100.8451	100.8451							
	61 to 79	56	59.33063	63.06867	65.64899	67.01643	68.86899	70.77275	104.0913	102.083	102.7643	102.7643							
	80 plus	12	14.50041	16.93882	21.27127	26.1714	28.24865	30.49079	125.577	123.0364	107.9371	107.9371							
Females		2011	2016	2021	2026	2031	2036	2041						1.082202	1.0371	0.991058	0.983263	0.991618	0.991618
	0 to 10	21	22.72625	23.5694	23.35864	22.9677	22.77518	22.58429	99.10578	98.32633	99.16182	99.16182		1.082202	1.0371	0.991058	0.983263	0.991618	0.991618
	11 to 18	16	13.7047	14.4078	15.86016	16.04328	15.98675	15.93041	110.0804	101.1546	99.64759	99.64759							
	19 to 35	16	16.63862	16.18072	15.47818	15.53952	15.94252	16.35598	95.65816	100.3963	102.5934	102.5934							
	36 to 60	68	65.81107	64.83368	63.45931	61.93036	61.73953	61.5493	97.88015	97.59066	99.69187	99.69187							
	61 to 79	52	54.852	57.9641	60.39191	61.09237	62.29075	63.51263	104.1885	101.1599	101.9616	101.9616							
	80 plus	10	10.92703	12.08066	14.27673	17.2402	18.72346	20.33433	118.1784	120.7574	108.6035	108.6035							
2011	Male	Female	Total	% Male	% Female		2026	Male	Female	Total	% Male	% Female	2041	Male	Female	Total	% Male	% Female	
	0 to 10	20	21	41	-5.54017	5.817175		0 to 10	21.79035	23.35864	45.14899	-5.62197	6.026597	0 to 10	21.06518	22.58429	43.64947	-5.13939	5.510015
	11 to 18	12	16	28	-3.3241	4.432133		11 to 18	11.88779	15.86016	27.74795	-3.06708	4.091968	11 to 18	11.99328	15.93041	27.92369	-2.92607	3.886631
	19 to 35	18	16	34	-4.98615	4.432133		19 to 35	17.1773	15.47818	32.65548	-4.43179	3.993415	19 to 35	18.10281	16.35598	34.45879	-4.41664	3.99046
	36 to 60	60	68	128	-16.6205	18.83657		36 to 60	56.99192	63.45931	120.4512	-14.7041	16.37269	36 to 60	57.18534	61.5493	118.7346	-13.9518	15.01653
	61 to 79	56	52	108	-15.5125	14.40443		61 to 79	65.64899	60.39191	126.0409	-16.9376	15.58129	61 to 79	70.77275	63.51263	134.2854	-17.2668	15.49553
	80 plus	12	10	22	-3.3241	2.770083		80 plus	21.27127	14.27673	35.548	-5.48805	3.683438	80 plus	30.49079	20.33433	50.82511	-7.43901	4.961079
	Total	178	183	361	-49.3075	50.69252		Total	194.7676	192.8249	387.5925	-50.2506	49.74939	Total	209.6101	200.2669	409.8771	-51.1398	48.86024

2016		Male	Female	Total	% Male	% Female	2031		Male	Female	Total	% Male	% Female
	0 to 10	21.25496	22.72625	43.98121	-5.79092	6.191777		0 to 10	21.42203	22.9677	44.38972	-5.42416	5.815529
	11 to 18	10.64645	13.7047	24.35115	-2.90063	3.733851		11 to 18	12.07514	16.04328	28.11843	-3.05748	4.062235
	19 to 35	18.35672	16.63862	34.99534	-5.0013	4.533199		19 to 35	17.20803	15.53952	32.74755	-4.35715	3.93468
	36 to 60	58.29041	65.81107	124.1015	-15.8812	17.93025		36 to 60	56.23088	61.93036	118.1612	-14.2379	15.68106
	61 to 79	59.33063	54.852	114.1826	-16.1647	14.94445		61 to 79	67.01643	61.09237	128.1088	-16.9689	15.46888
	80 plus	14.50041	10.92703	25.42744	-3.95064	2.977074		80 plus	26.1714	17.2402	43.4116	-6.62672	4.365301
	Total	182.3796	184.6597	367.0392	-49.6894	50.3106		Total	200.1239	194.8134	394.9373	-50.6723	49.32768
2021		Male	Female	Total	% Male	% Female	2036		Male	Female	Total	% Male	% Female
	0 to 10	21.90871	23.5694	45.47811	-5.80149	6.241244		0 to 10	21.24285	22.77518	44.01804	-5.28155	5.662529
	11 to 18	11.01014	14.4078	25.41795	-2.91552	3.815227		11 to 18	12.03414	15.98675	28.02089	-2.99201	3.974739
	19 to 35	17.83443	16.18072	34.01515	-4.72261	4.2847		19 to 35	17.64975	15.94252	33.59227	-4.38821	3.963744
	36 to 60	57.84237	64.83368	122.6761	-15.3168	17.16814		36 to 60	56.7061	61.73953	118.4456	-14.0987	15.35012
	61 to 79	63.06867	57.9641	121.0328	-16.7008	15.34906		61 to 79	68.86899	62.29075	131.1597	-17.1227	15.48717
	80 plus	16.93882	12.08066	29.01948	-4.48545	3.198992		80 plus	28.24865	18.72346	46.97211	-7.02338	4.65516
	Total	188.6031	189.0364	377.6395	-49.9426	50.05736		Total	204.7505	197.4582	402.2087	-50.9065	49.09347

Diagram 1.

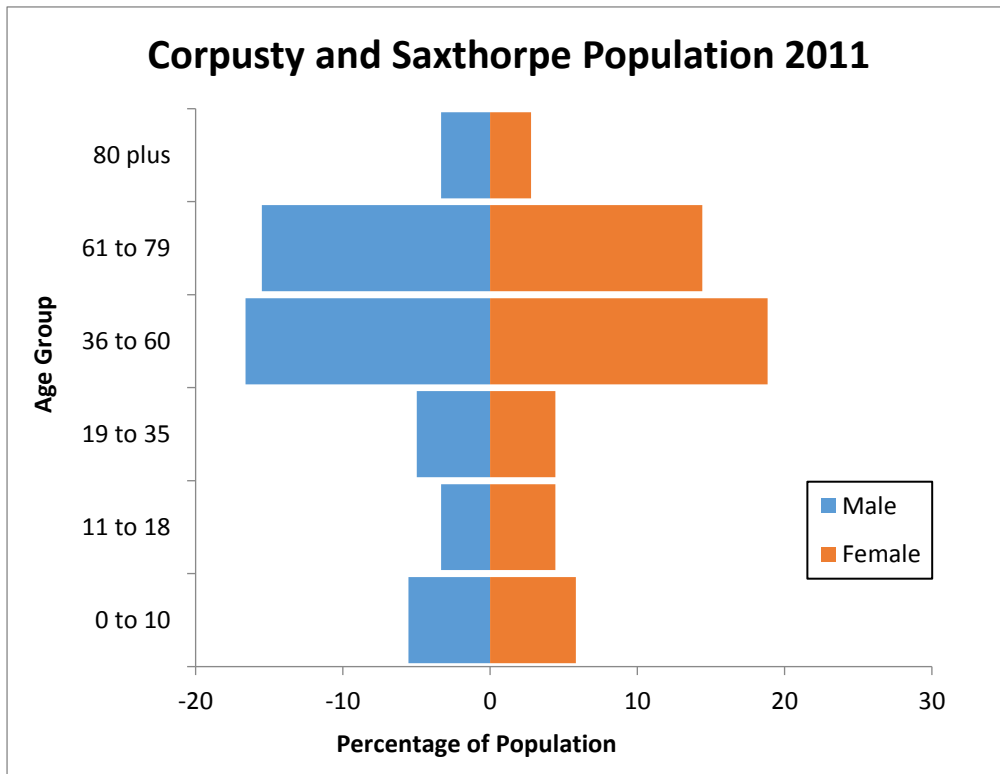


Diagram 2.

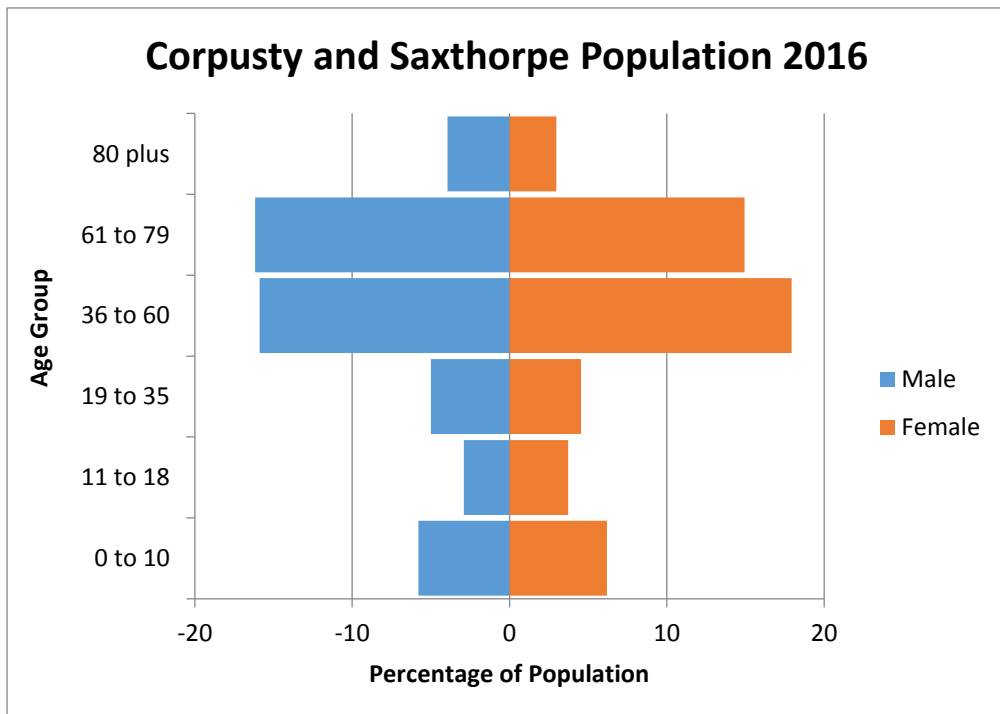


Diagram 3.

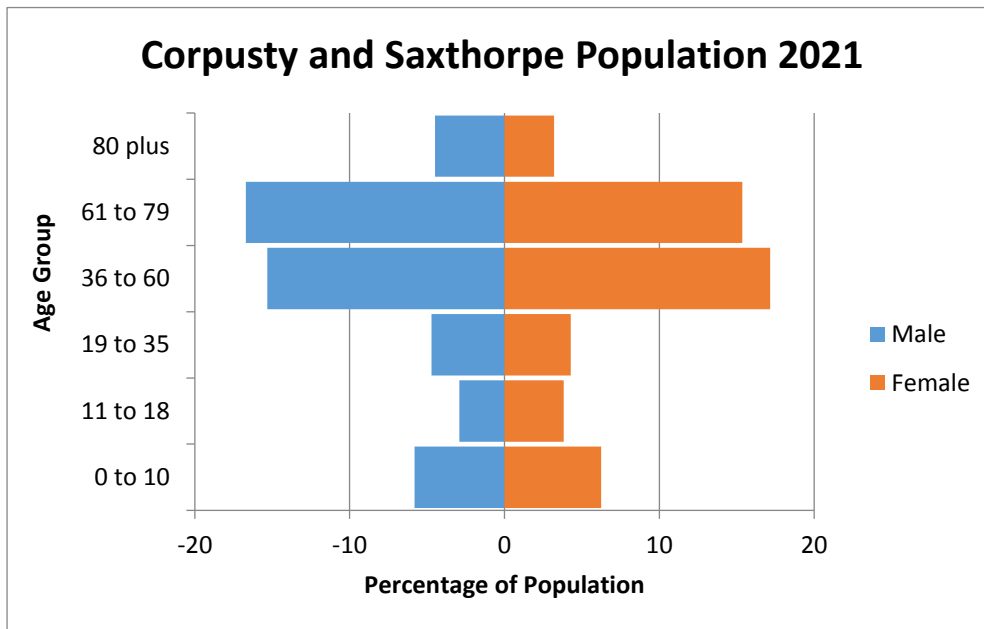


Table 3. Making new data based on increasing housing stock

	Q51-56	Q58-63			
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11-18	12	16	28	14.5	406
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61-79	56	52	108	70	7560
80 or over	12	10	22	80	1760
Total	184	177	361	TOTAL	16993
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SECOND SET OF PROJECTIONS and involves HOUSING STOCK INCREASE:

Based by 30 units of which we may assume:

- I. 25% will be “affordable housing” – this will be occupied by people in the 19-35 age group of whom 75% will be fertile at 1.9 TFR for this pop fraction
- II. 75% will be private housing and therefore will be available at private market rates, this 75% of the new stock will attract people in the 36-60 age group and they will have a TFT of 50% of the TFR of the 19-35 age cohort because some will have had children grow up and leave, some will be at the 1.9 level, so use TFR assumption of 0.95 for this group
- III. ON THE BASIS OF THOSE ASSUMPTIONS, CAN YOU MAKE Age-Gender PYRAMIDS AND OUTPUT TABLES FOR 2016, 2021, 2026, 2031, 2036, 2041

Assumption is that by 2019 housing stock increases, this is difficult to translate to the year estimates as unknown rate to which introduced, this have added to the pop of 2021 and created 2021-2041 pyramids.

Table 4.

		New estimates for 2021 based on increased housing stock					
2021		2021	2026	2031	2036	2041	
21.90871	adding 2	23.90871021	23.77954	23.3776	23.18207	22.98817351	
11.01014	adding 3	14.01014289	15.12693	15.36533	15.31316	15.26116544	
17.83443	adding 13 plus 1 child	31.83442574	30.66146	30.7163	31.50478	32.31349179	
57.84237	adding 23	80.84236842	79.65375	78.5901	79.25428	79.92408195	
63.06867		63.06866998	65.64899	67.01643	68.86899	70.77275295	
16.93882		16.93882289	21.27127	26.1714	28.24865	30.49078552	
2021		2021	2026	2031	2036	2041	
23.5694	adding 2	25.56940478	25.34076	24.91664	24.70779	24.50069485	
14.4078	adding 4	18.40780303	20.26338	20.49734	20.4251	20.35312422	
16.18072	adding 13 plus 1 child	30.18071959	28.87032	28.98474	29.73643	30.50761977	
64.83368	adding 23	87.83368339	85.97174	83.90039	83.64187	83.38414552	
57.9641		57.96409882	60.39191	61.09237	62.29075	63.51262977	
12.08066		12.0806578	14.27673	17.2402	18.72346	20.33432614	
PC Change projection							
			99.45974	98.3097	99.1636	99.16360285	
			107.9713	101.576	99.66046	99.66046144	
			96.31543	100.1789	102.567	102.5669555	
			98.52971	98.66466	100.8451	100.8451246	
			104.0913	102.083	102.7643	102.7643292	
			125.577	123.0364	107.9371	107.9371271	
			99.10578	98.32633	99.16182	99.1618199	
			110.0804	101.1546	99.64759	99.64759161	
			95.65816	100.3963	102.5934	102.5934134	
			97.88015	97.59066	99.69187	99.69187212	
			104.1885	101.1599	101.9616	101.9615783	
			118.1784	120.7574	108.6035	108.6034668	

With changes to housing stock - projections										
Females	Total	% Male	% Female	2036		Males	Females	Total	% Male	% Female
25.5694	49.47811	-5.167892024	5.526852845		0 to 10	23.18207	24.70779	47.88986	-4.770980625	5.084981724
18.4078	32.41795	-3.028306632	3.978865343		11 to 18	15.31316	20.4251	35.73826	-3.151521618	4.203584292
30.18072	62.01515	-6.881043495	6.523593229		19 to 35	31.50478	29.73643	61.24121	-6.483834334	6.11990005
87.83368	168.6761	-17.47416014	18.98533998		36 to 60	79.25428	83.64187	162.8962	-16.31091158	17.21389758
57.9641	121.0328	-13.63235715	12.5289989		61 to 79	68.86899	62.29075	131.1597	-14.17356767	12.81973446
12.08066	29.01948	-3.661343792	2.611246467		80 plus	28.24865	18.72346	46.97211	-5.813708365	3.853377702
232.0364	462.6395	-49.84510323	50.15489677		Total	246.3719	239.5254	485.8973	-50.70452419	49.29547581
Females	Total	% Male	% Female	2041		Males	Females	Total	% Male	% Female
25.34076	49.1203	-5.045984087	5.377271807		0 to 10	22.98817	24.50069	47.48887	-4.650247684	4.956213656
20.26338	35.39031	-3.209912235	4.299859126		11 to 18	15.26117	20.35312	35.61429	-3.087161283	4.117206995
28.87032	59.53179	-6.506317581	6.126240201		19 to 35	32.31349	30.50762	62.82111	-6.536654175	6.171346676
85.97174	165.6255	-16.90240946	18.24307792		36 to 60	79.92408	83.38415	163.3082	-16.16773846	16.86767021
60.39191	126.0409	-13.93061918	12.81507524		61 to 79	70.77275	63.51263	134.2854	-14.31652803	12.84788717
14.27673	35.548	-4.513731581	3.029501586		80 plus	30.49079	20.33433	50.82511	-6.167941298	4.113404355
235.1148	471.2568	-50.10897412	49.89102588		Total	251.7505	242.5925	494.343	-50.92627093	49.07372907
Females	Total	% Male	% Female							
24.91664	48.29423	-4.892053043	5.214116247							
20.49734	35.86267	-3.215386607	4.289323042							
28.98474	59.70104	-6.4277688	6.065416825							
83.90039	162.4905	-16.44595616	17.55720034							
61.09237	128.1088	-14.02402223	12.78433911							
17.2402	43.4116	-5.476690384	3.607727218							
236.6317	477.8688	-50.48187722	49.51812278							

Diagram 4.

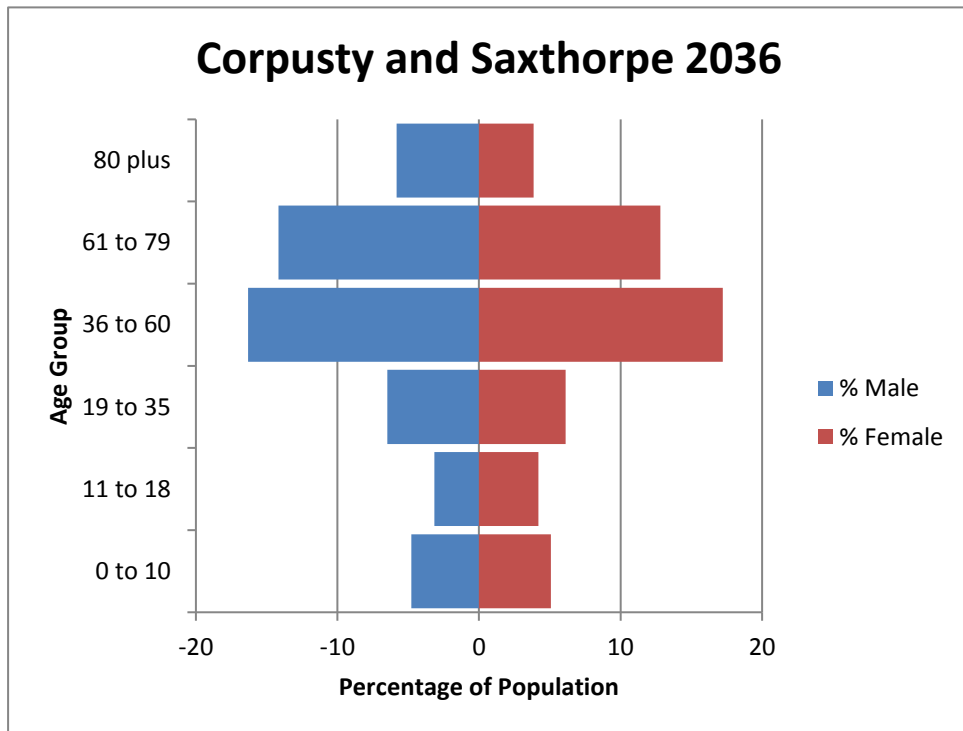


Diagram 5.

