Wansford Parish Council

Deadline 6 Submission

Comments on Document 9.23 Applicant's Further Response to Actions from Hearings – Annexe C Wansford Traffic Model Calibration and Peterborough Road Sensitivity Test Technical Note

A47 Wansford to Sutton Dualling

In response to the Examining Authority's request for actions by the Applicant National Highways has submitted a 30 page Technical Note covering calibration of the modelling and attempting some sensitivity analysis in terms of the traffic flows.

The methodology for this work is fairly complex and no doubt it follows the guidance for such calibration and testing.

While it is very fine to follow the guidance, there are times when common sense and engineering judgement need to be used. The original figures used in the traffic analysis of the western roundabout are shown below (since then the modelling years and other factors have changed slightly but the basic pattern remains).

Site Number	Site Name	2 WAY AADT BASE	2 WAY AADT 2022 DM	2022 DM-Base	Difference	2 WAY AADT 2022 DS	2 WAY AADT 2022 DIFF	2 WAY AADT 2037 DM	2 WAY AADT 2037 DS	2 WAY AADT 2037 DIFF	2037 DS - Base	Difference as %
1	A1 North	51400	59400	8000	16%	61100	1700	70800	72200	1400	20,800	40.47%
2	A47 main line west	11500	15000	3500	30%	16500	1500	17700	20400	2700	8,900	77.39%
3	A6118 (Old North	4400	2400	2000	-45%	1900	-500	3100	2700	-400	-1,700	-38.64%
4	A1 South	44000	54700	10700	24%	53500	-1200	66600	65900	-700	21,900	49.77%
5	Sacrewell	400	500	100	25%	500	0	500	500	0	100	25.00%
6	A47 main line east of Sacrewell and	23300	25600	2300	10%	31500	5900	30000	37500	7500	14,200	60.94%
7	Sutton Heath Road,	2200	2500	300	14%	2100	-400	2800	2400	-400	200	9.09%
8	Langley Bush	800	900	100	13%	600	-300	900	700	-200	-100	-12.50%
9	A47 main line east	22600	24900	2300	10%	30900	6000	29200	36500	7300	13,900	61.50%
10	Nene Way	500	500	0	0%	700	200	600	800	200	300	60.00%
11	Sutton Heath Road,	1400	1600	200	14%	1500	-100	2000	1800	-200	400	28.57%
12	A47/A1 western interchange	8500	10100	1600	19%	10200	100	11400	10400	-1000	1,900	22.35%
13	A1 NB Off Slip	2400	3900	1500	63%	4700	800	4900	5800	900	3,400	141.67%
14	A47/A1 interchange	20400	22900	2500	12%	27100	4200	26500	32000	5500	11,600	56.86%
15	A47/A1 interchange	20400	22900	2500	12%	24300	1400	26500	28500	2000	8,100	39.71%
16	A47/A1 eastern interchange	9400	9800	400	4%	4800	-5000	11000	5900	-5100	-3,500	-37.23%
17	A47/A1 eastern	23500	25600	2100	9%	24100	-1500	30000	28700	-1300	5,200	22.13%
18	Peterborough Road,	1300	1400	100	8%	1900	500	1700	2300	600	1,000	76.92%
19	A47 main line west	23100	25600	2500	11%	31500	5900	30100	37500	7400	14,400	62.34%

From the table it can be seen that between the base year and the end of the modelling period all the flows on the A47 and the A1 have increased by between 40 and 80%. The flow on Old North Road is shown as reducing by nearly 40% over the same period.

This completely atypical change results from the use of a very crude algorithm that states that driver behaviour is completely driven by distance and speed limits. Anyone looking at this with an

analytical mind would say “what happens if this algorithm is wrong?”. The response, using normal engineering judgement, would be to do a simple check run of the model using traffic numbers for Old North Road that increase in line with other flows.

In their sensitivity analysis, NH have used slightly higher flows for Old North Road than in the base case but they are still significantly lower than the flows in the base year.

This issue has been pointed out repeatedly to NH but they persist in using complex calculations to try and prove their case. They seem to believe that the traffic prediction system that shows this large reduction in flows on Old North Road is infallible. History has shown that no modelling of the future is infallible.