

OVG Manchester:

Appendix 6.5 – Model Verification

OVG Manchester- EIA Chapter 6 Air Quality

Appendix 6-5 Model Verification

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Appendix 6.5 Model Verification

Results from model verification are presented in Table 1. Results indicate that the model under-predicts road NOx contribution, and therefore it is necessary to apply an adjustment factor of 1.2797 (see Figure 1).

This adjustment factor has subsequently been applied to all modelled road NOx concentrations. Adjusted NOx is presented in Figure 2 and Table 2.

Table 1 Model verification results

Monitoring Site ID	Modelled road NOx	Monitored road NOx	% Difference
MAN28	21.8	29.2	-25.5
DT86a	19.1	22.9	-16.6

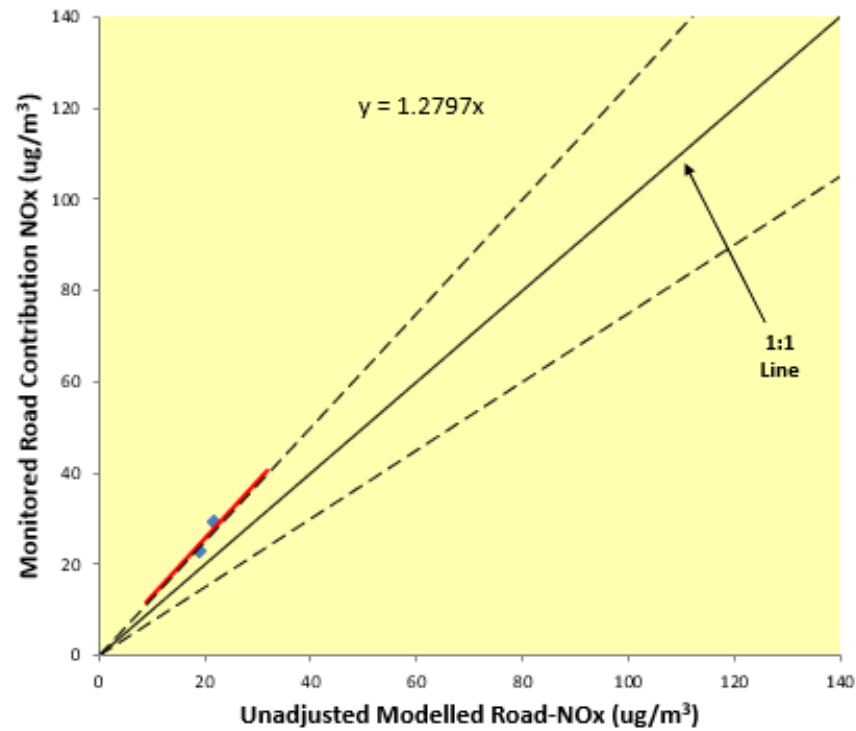


Figure 1 Modelled and monitored road NOx

Table 2 Adjusted modelled road NOx

Monitoring Site ID	Background		Modelled Road NOx	Monitored Road NOx	Adjusted Modelled Road NOx	% Difference after Adjustment
	NOx	NO ₂				
DT28	34.2	22.4	21.8	29.2	27.9	-4.6
DT86a	29.9	20.1	19.1	22.9	24.4	6.7

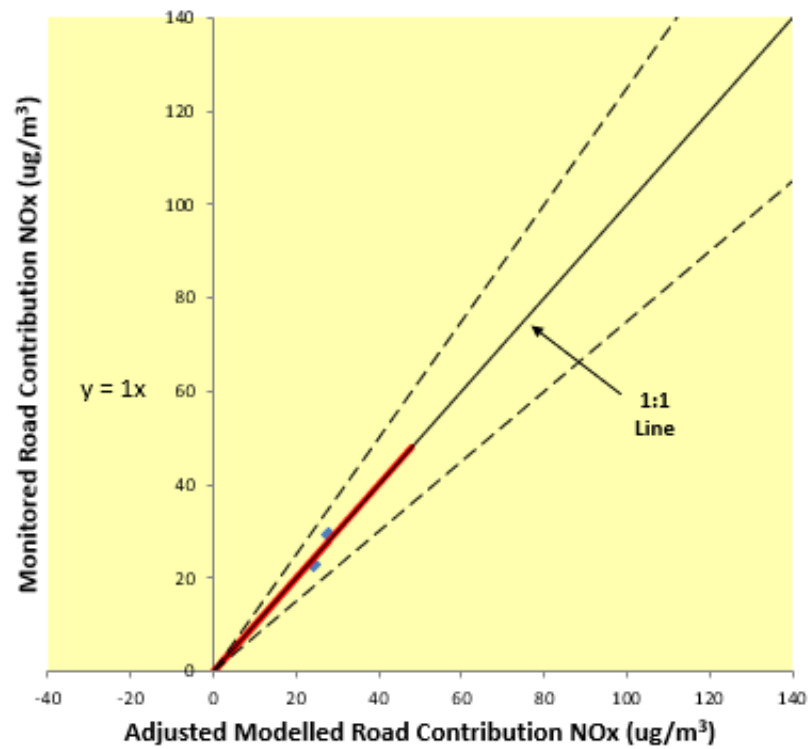


Figure 2 Adjusted modelled road NOx