

Appendix 10C: Traffic Data and Noise modelling parameter sources

Table 10.29 shows the traffic data used in the CadnaA noise modelling for operational noise, including Annual Average Weekday Traffic (AAWT) volumes, average speeds and percentage of HGVs. The traffic data was provided by the Jacobs transport planning department. For details of the road names refer to Volume 3, Chapter 11: Traffic & Transport.

Table 10.29 Traffic data used in the CadnaA noise modelling

Year	Road names	AAWT, 18h traffic volumes	% of HGVs	Average speed (km/h)
2022 Do-Minimum	R515(E)	4002	7	80
	R515(W)	4216	7	80
	Unnamed(N)	400	5	50
	Unnamed(S)	52	12	50
	ATC4	143	4	44
	ATC6	295	2	25
	L1327(E)	682	6	50
	L1327(W)	1009	6	50
	L1533(E)	1413	4	50
	N20(N)	12339	10	80
	N20(S)	11790	10	80
	Unnamed(N)	146	3	50
	Unnamed(S)	330	6	50
	ATC7	120	9	50
	ATC8	113	6	39

Year	Road names	AAWT, 18h traffic volumes	% of HGVs	Average speed (km/h)
	ATC9	1014	5	60
	N20	11790	10	80
2037 Do-Minimum	R515(E)	4099	7	80
	R515(W)	4317	7	80
	Unnamed(N)	409	5	50
	Unnamed(S)	53	12	50
	ATC4	143	4	44
	ATC6	295	2	25
	L1327(E)	736	6	50
	L1327(W)	1091	6	50
	L1533(E)	1486	4	50
	N20(N)	13150	10	50
	N20(S)	12571	10	50
	Unnamed(N)	146	3	50
	Unnamed(S)	330	6	50
	ATC7	120	9	50
	ATC8	113	6	39
	ATC9	1014	5	60
	N20	12571	10	80

Year	Road names	AAWT, 18h traffic volumes	% of HGVs	Average speed (km/h)
	ATC10	2397	5	67
2022 Do-Something	R515(C)	4329	7	80
	R515(E)	4000	7	80
	R515(W)	4179	7	80
	Unnamed(N)	392	5	50
	Unnamed(S)	28	4	50
	ATC4	147	4	44
	ATC6	295	2	25
	L1327(E)	685	6	50
	L1327(W)	977	6	50
	L1533(E)	1386	4	50
	N20(N)	11934	10	50
	N20(S)	11386	10	50
	Unnamed(N)	146	3	50
	Unnamed(S)	330	6	50
	ATC7	1160	9	50
	ATC8	108	6	39
	ATC9	1027	5	60
	N20	11790	10	80
	ATC10	2274	5	67

Year	Road names	AAWT, 18h traffic volumes	% of HGVs	Average speed (km/h)
2037 Do-Something	R515(W)	4319	7	80
	R515(C)	4476	7	80
	R515(E)	4230	7	80
	Unnamed(N)	412	5	50
	Unnamed(S)	29	4	50
	ATC4	154	4	44
	ATC6	295	2	25
	L1327(E)	723	6	50
	L1327(W)	1031	6	50
	L1533(E)	1386	4	50
	N20(N)	11934	10	50
	N20(S)	11386	10	50
	Unnamed(N)	146	3	50
	Unnamed(S)	330	6	50
	ATC7	1160	9	50
	ATC8	108	6	39
	ATC9	1027	5	60
	N20	12571	10	80
	ATC10	2397	5	67

Noise modelling

Table 10.30 details the assumptions used in the CadnaA noise model to assess operational noise effects.

Table 10.30 Noise modelling parameter sources

Parameter	Source	Details
Calculation method	CRTN	
Calculation engine	CadnaA noise modelling software	
Horizontal distances	Ordnance Survey Ireland (OSI)	OSI Largescale mapping
Ground levels	OSI	5m OSI contours
Building heights	N/A	6m in height
Addresses	OSI	Geo-directory (2019)
Receptor position	N/A	1m from façade and 1.5m (ground floor and 4m (first floor) in height
Absorbent Ground	N/A	Soft ground G=1
Road surface type	N/A	Bituminous impervious
Texture depth	N/A	2.0 mm