

DRAFT STATE PLANNING POLICY 5.4 - ROAD AND RAIL NOISE

KEY ISSUES + THE INDUSTRY RESPONSE

Freight and Logistics Council of WA Brookfield Place 30 October 2017



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LAeq vs Lamax

Application to freight rail



GROUND BORNE VIBRATION

CONSTRUCTION STANDARDS

Inclusion of roofing materials (zincalume vs clay tiles)

ROAD AND RAIL FREIGHT TRAFFIC FORECASTS

- Availability/access to agreed forecasts for rail freight traffic
- Rail freight data used to inform Table 2 Noise Forecasts (2 train movements per hour)
- Is a 20 year planning horizon long enough to protect the primary road and rail freight network?

ONLINE MAPPING

LANGUAGE / TERMINOLOGY + PHRASING

- Clarity on what constitutes "unavoidable" residential land use and development
- "Not recommended" + "strongly discouraged"
- Comments on "on track mitigation" to address noise and vibration eg FAQ 9 "Short term noise events, which are well captured by the Lamax metric are more effectively controlled at source."

IMPLEMENTATION CHALLENGES

- Single house + ancillary dwelling development approval exemptions
- DWER referrals + resourcing

TECHNICAL + COMPLEX MATTER

Technical capacity of decision makers i.e. local government and Department of Planning





CURRENT SPP 5.4

Rail	Characteristics	Movements per	Distance from rail centreline (metres)										
	Characteristics	day	10	20	30	40	50	100	200	300			
Passenger	80 km/hr Type A, 2 car sets.	100	60	56	54	52	51	47	41	39			
(L _{Aeq,Day}), dB ¹⁰		200	63	59	57	55	54	50	44	41			
		300	65	61	59	57	56	52	46	43			
Freight (L _{Aeq,Night}) 11	Typical mix S or Q, P and D, AB, DA etc. or L class locomotives, and numbers of wagons varying from 45 to 90. Notch settings	1 per hour (minimum)	65	61	59	58	57	53	49	46			
	5-8.	2 per hour	68	64	62	61	60	56	52	49			

¹⁰ Assumes level soft open ground between traffic and building, neutral weather effects. All values include +2.5 dB façade correction. It is acceptable to estimate values between intervals.

DRAFT SPP 5.4

Transport Corridor Classification		Movements/day	ovements/day Forecast noise level (LAeq,Day) and exposure category based on distance from nearest rail centreline (m)																				
			1	0 2	20 3	30 4	10 5	0 6	50 7	70 8	30 9	90 1	00 1	10 1	20 1	30 1	40 1.	50 1	75 2	00 2	25 2	50 275	300
			adjacent																				
Passenger railways Map 3	Joondalup-Butler	260	68	64	61	60	59	58	57	56	56	55	55	54	54	53	53	52	52	51	50	50	49
	Midland	170	66	62	59	58	57	56	55	54	54	53	53	52	52	52	51	51	50	49	48	48	47
	Fremantle	160	66	61	59	58	56	56	55	54	53	53	52	52	52	51	51	50	49	49	48	48	47
	Armadale-Thornlie	290	68	64	62	60	59	58	57	57	56	56	55	55	54	54	53	53	52	51	51	50	50
	Mandurah	250	68	64	61	60	59	58	57	56	56	55	55	54	54	53	53	52	51	51	50	50	49
	Other lines	300	68	64	62	60	59	58	57	57	56	56	55	55	54	54	54	53	52	51	51	50	50
Freight railways Map 1, 2, 3 (LAeq,Night)		-	70	66	64	62	61	60	59	59	58	58	57	57	56	56	55	55	54	53	53	52	52



¹¹ For freight rail traffic, levels for the day and night periods (L_{Aeq,Day} and L_{Aeq,Night}) are assumed equal to reflect the 24-hour nature of operations. Assessment is to be made on the basis of a one-hour period which includes at least one typical train movement. Site measurements to confirm are recommended.

LAeq vs Lamax

⊘ITE[†]

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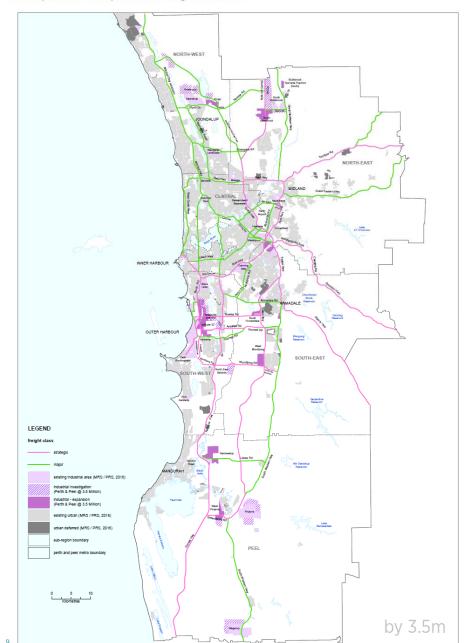
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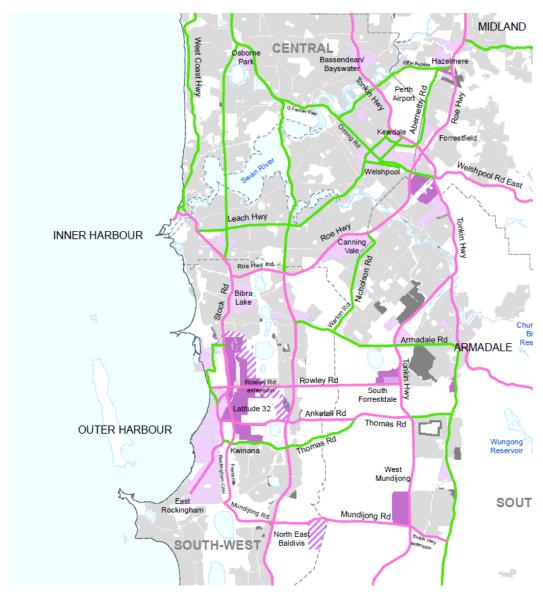
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MAP 4
Metropolitan Principal Road Freight Network







KEY ISSUES+

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171030 pp FLCWA Presentation

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CONTINUE TO SEEK SUPPORT FOR:



- Application of the LAmax metric to freight rail
- The Policy to address ground borne vibration modelling and mitigation
- Improvements to construction standards
- Modifications to the terminology, language and phrasing of the Policy + Guidelines

HIGHER STANDARDS APPLICABLE TO THE PRINCIPLE FREIGHT NETWORK

As per Transport @ 3.5 Million, or an updated freight network plan for Perth + Peel reflecting outcomes
of Westport Taskforce Port and Environs Strategy, seek greater protection of the Principle Freight
Network

CONTINUE TO SUPPORT THE CITY OF COCKBURN APPROACH

 Detailed noise and vibration modelling based on the Lamax metric, Special Control Area and deemed to comply packages (notifications on title and construction standards)

SEEK MODEL OR DEEMED PROVISIONS FOR LOCAL PLANNING SCHEMES

 Develop model or deemed provisions for Special Control Areas relating to road and rail corridors for consistent implementation through local planning schemes

EDUCATION + TRAINING OF THE PROFESSION + DEVELOPMENT INDUSTRY

- Request that the WAPC/Department of Planning run extensive industry wide training, following the release of the Policy
- Lobby for the WAPC/DoP to produce a "practice manual" to guide planners in statutory assessment to refer proposals to key stakeholders, obtain current and forecast traffic data etc

APPLICATION REFERRALS TO DWER +/OR ACCREDITATION OF ACOUSTIC CONSULTANTS

- Support the referral of proposals to Department of Water and Environmental Regulation for comment
- Support the City of Cockburn's call for a panel of accredited acoustic consultants to assess proposals

RESPONSE+



STAY IN TOUCH+

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