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SPP5.4 Review  
Policy and Priority Initiatives  
Department of Planning Lands and Heritage  
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To whom it may concern

### **Draft State Planning Policy 5.4 - Road and Rail Noise**

Thank you for the opportunity to provide feedback regarding the Draft State Planning Policy 5.4 Road and Rail Noise and the associated Implementation Guidelines. The Urban Development Institute of Australia (UDIA) WA is the peak body representing the urban development industry in Western Australia. UDIA is a membership organisation with members drawn from the development, planning, valuation, engineering, environmental, market research and urban design professions. Our membership also includes a number of key State Government agencies and Local Government Authorities from across the state. Nationally, UDIA represents the interests of thousands of members, including all of the major land and built-form development companies, and consultancy firms.

UDIA welcomes the Government's commitment to ensuring that development and households are protected from the adverse impact of road and rail noise. As Perth's urban form becomes more consolidated with increased infill development through initiatives such as Metronet, it is important that development controls are effective and proportional to the level of transport noise experienced, enabling the delivery of cost effective development as well as quality living environments. As such, it is imperative that the adverse impacts of road and rail noise are equitably addressed by all stakeholders involved including infrastructure providers and operators. Indeed as the accompanying FAQ document acknowledges, noise mitigation treatments "*are more effectively controlled 'at source'*". Therefore it is vital that infrastructure providers and operators use contemporary practices to mitigate adverse noise impacts.

Whilst UDIA welcomes the draft Policy's revised layout and structure which make the Policy provisions clearer, the Institute is concerned about a variety of aspects of the Policy. The Institute's primary concerns are set out below, whilst the attached appendix contains comments relating to specific components of the draft Policy and Implementation Guidelines.

#### ***Proposed Policy Response***

The draft Policy fails to recognise that to a large extent, the property market effectively regulates issues concerning transport noise itself. Individual property purchasers will consider a range of relevant factors in their decision making, including price and location and will form their decisions

based upon their personal preferences. As such, the need for market invention and the community benefits of this intervention have not been clearly articulated. This failing raises concerns that the proposed policy response has been developed without the preparation of a robust evidence base to inform policy decisions. The Institute understands that public concerns relating to transport noise have largely been restricted to a relatively small number of specific locations adjacent to the freight rail network. Yet despite this, the Policy applies broad-brush measures across the State that will unnecessarily capture a large number of development proposals whilst not necessarily adequately resolving the issues experienced in those areas most affected by transport noise. Furthermore, the Institute is concerned that rather than permitting outcomes-based solutions, with the most appropriate measures chosen based on particular circumstances, it sets out generic, prescriptive solutions. For example, site specific factors are likely to mean that the building design solutions prescribed in section 4.4 of the Implementation Guidelines are not always appropriate and in many circumstances are likely to conflict with the provisions of *Draft State Planning Policy 7.3 Apartment Design*. The Policy needs to afford greater recognition to context and other planning considerations.

### ***Policy Application and Triggers***

The stated intent of the draft Policy is to ‘*minimise the adverse impact of road and rail noise on noise-sensitive uses within the specified trigger distance of major transport corridors*’. However the inclusion of land within 200m of secondary roads expands the Policy far beyond the intent to manage development within the vicinity of ‘major transport corridors’. UDIA contends that in order to retain widespread support for the Policy, it is imperative that the Policy triggers are consistent with its aims.

### ***Recommendation***

1. The Policy triggers are revised so that the application of the Policy focuses only on ‘major transport corridors’. Consideration should be given to removing secondary roads from the policy triggers or as a minimum, ensuring that only development directly facing secondary roads trigger the Policy.

### ***Policy Implementation***

The draft Policy acknowledges that its successful implementation relies on the use of discretion as “*in some circumstances it may not be reasonable or practical for the noise criteria to be met*”. However, the Institute has concerns regarding the removal of noise ‘targets and limits’ as set out by the current SPP. This removes clarity regarding the use of discretion and is likely to lead to different decision makers applying the Policy’s requirements inconsistently. Another key benefit of the existing ‘target and limit’ approach is that it provides flexibility and acknowledges the very different challenges posed by managing noise sensitive development and transport noise in existing infill areas versus that in greenfield areas. The replacement of the noise limit with a single noise criteria metric at a considerably lower noise threshold, greatly increases development performance requirements and therefore development costs, which, are ultimately passed on to property purchasers.

Concerns regarding the consistent application of the draft Policy are furthered by the encouragement for local planning schemes to establish ‘Special Control Areas’ and also allowing local government to “*prepare local planning policies to supplement or elaborate on measures associated with the*

*implementation of this policy*". The Implementation Guidelines and mapping accompanying the draft Policy clearly articulate the locations in which the Policy applies and how it should be applied. In addition, as a State Planning Policy, due regard is given to its requirements by all planning schemes, structure plans, as well as in the assessment of all relevant development applications. Therefore the need for the designation of Special Control Areas is superfluous. Likewise, the need for local governments to 'supplement' the draft Policy is unnecessary, inefficient and will create inconsistencies. Instead the draft Policy should reiterate that any local planning policies concerning road and rail noise must be consistent with the provisions of the SPP.

The Institute is concerned that the provisions of the Residential Design Codes (R-Codes) do not allow the development outcomes that the draft Policy implies. Therefore, greater clarity is needed with regard to how the draft Policy requirements will be implemented alongside the provisions of the R-Codes. It is also unclear how the 'Quiet House' requirements will be enforced.

#### *Recommendation*

2. The noise limit and target be re-established, in order to ensure the delivery of the most appropriate development outcomes by providing greater clarity in the use of discretion.
3. The draft Policy remove reference to the establishment of 'Special Control Areas'.
4. To ensure consistency, the draft Policy should discourage the adoption of local planning policies concerning road and rail noise and be clear that any such policies must be consistent with the provisions of the SPP.
5. Clarity be provided with regard to how the draft Policy provisions will be implemented alongside the provisions of the Residential Design Codes.

#### ***Policy Impact Assessment***

The increased development requirements through the removal of the noise limit combined with the broad application of the draft Policy mean that it will have a considerable and wide spread impact. As such, the Institute queries whether a cost benefit analysis of the measures has been undertaken that includes costing estimates for the design packages and how this is likely to affect housing affordability. From the available information, it is unclear if any analysis has been undertaken to determine the number of lots and dwellings that the proposal is likely to affect and the extent of the impact. Any assessment of development cost implications should not be confined to assessing building design but also how lot yield is likely to be impacted by the Policy. The requirement to provide outdoor living areas away from noise sources is likely to have significant implications for lot yields and building construction costs, thereby negatively impacting the price of land and housing affordability. Likewise the requirement to achieve proposed noise criteria for bedrooms during the day is excessive given the very small percentage of the population undertaking night shift work.

As single houses are exempt from requiring planning approval, the policy measures will disproportionately affect other residential forms such as apartments. As a result, the Policy is likely to further hamper the delivery of more diversity in the housing stock. Likewise, the draft Policy will place excessive requirements on subdivision proposals, despite the fact that the majority of the measures to mitigate noise are confined to building design.

### *Recommendation*

6. A cost-benefit analysis of the draft Policy is undertaken, identifying the total number of dwellings and lots likely to be affected by the draft Policy, the likely extent of the impact and appropriacy of the mitigation measures proposed. UDIA suggests that several scenarios be examined and would welcome the opportunity to assist in this process. The Institute recommends that the Department works with the development industry to analysis actual examples.

### ***Policy Assumptions***

The Institute is concerned about the crude nature of the assumptions used to calculate noise. Whilst the Policy is designed to protect sensitive uses from noise, it is built upon traffic modelling and not actual noise generated and experienced. The Institute is extremely concerned that the assumptions used to trigger noise assessments within the Metropolitan Region are fundamentally flawed. The mapping shows that within the Metropolitan Region, the application of the Policy is largely triggered by the 200m distance from secondary roads. The noise forecast assumptions for these roads are based upon a traffic speed of 80km/h, however the majority of these roads have speed limits of 60km/h. UDIA also queries whether the assumption of the use of dense grade asphalt is appropriate.

### *Recommendation*

7. That the Department evaluates the accuracy of the noise forecast assumptions set out in Table 2 of the Implementation Guidelines, particularly for the Metropolitan Region and provides appropriate evidence to validate these assumptions.

UDIA trusts that the comments and recommendations provided will assist in the finalisation of the State Planning Policy. Should the Department require any assistance or further information regarding this matter, the UDIA would be delighted to assist. Please do not hesitate to contact Chris Green, Director of Policy and Research at [cgreen@udiawa.com.au](mailto:cgreen@udiawa.com.au) or 9215 3400.

Yours sincerely



**Allison Hailes**  
**Chief Executive Office**

## Policy Specific Comments

Section	Comments
Draft State Planning Policy 5.4 Road and Rail Noise	
4.13 Railways	The Policy identifies the straightening of curves and re-sleepering as an upgrade and thereby triggering the application of the Policy. However, both the straightening of curves and re-sleepering are likely to improve rail noise performance and should therefore be encouraged rather than jeopardising such works being for fear of triggering the Policy requirements. This also conflicts with 4.3 policy exemptions which encourages providers to 'continuously enhance assets to reduce noise levels'. The Institute suggests that any works which are likely to reduce noise should be exempt.
4.3 Policy Exemptions	The Policy states that it does not apply to noise from existing roads or rail, however an upgrade could trigger the application of the Policy. Whilst understanding the intent, UDIA is concerned that the triggering of Policy requirements by minor upgrades to infrastructure may prevent operators from undertaking such works. Rather than restricting improvements, the Policy should give regard to whether infrastructure upgrades are likely to improve noise performance. Only those infrastructure upgrades are likely to have a significant negative impact should they trigger the requirements for mitigation measures.
d)	Acknowledges that transport construction proposals do not require planning approval, however providers are expected to carry out works consistent with the Policy. Whilst it is unclear how this will be achieved, the Institute contends that this statement should be more prominent within the Policy.
e)	The Institute queries why resealing is exempt but re-sleepering is not, given that they are effectively the same thing?
f)	Much of the focus of the policy outcomes are on ensuring that buildings are designed appropriately to mitigate the impact of the noise source. Therefore it is somewhat illogical that a subdivision proposal could potentially be refused for not adhering to the Policy whilst single houses (which can be designed to mitigate transport noise) are exempt from requiring planning approval therefore satisfying the policy requirements. The Policy needs to provide clarity as to what 'strongly encourage to consider the incorporation of the Guidelines quiet house design requirements' means.

Table 2	<p>The Institute notes that the proposed indoor noise criteria for bedrooms is the same during the day as it is at night. According to the ABS 7% of employees usually worked between 7pm and 7am<sup>1</sup>. With the current employment participation rate running at 65% <sup>2</sup> approximately just 4.5% of the population are likely to work night shift. As such, noise mitigation to protect bedrooms against the higher volumes of traffic during day time hours is excessive.</p> <p>The Institute queries why development proposals are required to meet the outdoor noise requirements for all floors, whilst new transport infrastructure is only required to meet the criteria to the first two floors. The same criteria should apply, no matter who the development proponent. In addition, the treatment of the first two floors for road and rail proposals should be clarified as this may not always be the most appropriate option, particularly where infrastructure is elevated above noise receivers.</p>
6 Policy Measures	<p>This section states that <i>“the planning process should apply the precautionary principle of avoidance where there is risk of future land use conflict”</i>. The precautionary principle is a specific concept in environmental science that is used to justify a conservative approach to decision-making where there is a lack of scientific consensus and/or evidence to demonstrate that a proposed action will not be harmful. The emission of noise from a particular source, such as a road or railway, is measurable and its characteristics well understood. The precautionary principle is not appropriate in this context. It may be appropriate to take a considered approach underpinned by comprehensive and accepted reporting, but this should not be described as <i>“the precautionary principle”</i>.</p> <p>These deficiencies are compounded in the draft policy because the term <i>“the precautionary principle”</i> is used in combination with the word ‘avoidance’, which is an entirely different concept in risk management and planning. In the context of a conservative approach to managing land use conflict, the principle of ‘avoidance’ may be appropriate, but it must be properly defined and advocated in a manner that acknowledges that avoidance is not always possible or desirable. The second paragraph in Section 6 provides clarity in this regard, but in the preceding paragraph the concept of ‘avoidance’ should not be referenced in association with the ‘precautionary principle’.</p>
6.4 Noise Management Plan	<p>The Institute queries what ‘undeveloped land zoned with the potential to accommodate noise-sensitive use’ means, this should be clarified.</p>

<sup>1</sup> ABS 6342.0 Working Time Arrangements, Australia, November 2012

<sup>2</sup> ABS 6202.0 - Labour Force, Australia, Oct 2017



<p>7 Implementation</p>	<p>The implementation of the Policy is unclear with conflicting guidance. The Policy states that there is a ‘general presumption against approving the proposals that cannot achieve the Policy, however in some circumstances it may not be reasonable or practical for the noise criteria to be met and therefore decision makers should use discretion.’ In doing so they should consider, amongst other items, the requirements of other plans and policies. As such, the Institute is concerned that different decision makers are likely to apply the policy requirements differently, particularly given the removal of the noise ‘target’ and ‘limit’ that the previous policy set out. Further the Institute queries whether the final part of this section means that policies such as activity centres, planning for bushfire prone areas, and Metronet would take priority if they conflict with the draft policy? Likewise the Institute is also concerned that a number of the outcomes sought by the policy are inconsistent with the requirements of the residential design codes. As such, the Institute queries whether an analysis of the draft SPP and the R-codes provisions have been undertaken?</p>
<p>7.1 High-order strategic planning b) iii</p>	<p>The Policy needs to be clear that compliance with the Quiet House Packages adequately demonstrates that subsequent planning stages are able to be comply with the requirements of the Policy. The Institute is concerned that subdivision proposals may not be supported by decision makers who may not consider the single house exemption to demonstrate compliance.</p>
<p>7.3 Subdivision and development</p>	<p>This section states that subdivision should seek to manage and avoid land use conflict though the design of the street and lot configuration in accordance with the Guidelines, however advice is provided in Guidelines concerning this.</p>
<p>7.3.1 Conditions of subdivision and development</p>	<p>This section states that a condition may be imposed on subdivision applications requiring amongst other items, the preparation of a Local Development Plan. However, Local Area Plans are the responsibility of a local government and should not be a condition of subdivision approval.</p>
<p>7.4 Major road and railway construction proposals a) c)</p>	<p>Contrary to the objectives of Metronet, this section encourages new road and rail proposals to select routes that maximises separation distances from noise-sensitive uses.</p> <p>c) encourages the acquisition or preservation of adequate space in transport corridors to ensure appropriate set backs to mitigate noise. UDIA is concerned that the use of setbacks as a stand-alone mitigation measure is inefficient and effectively sterilises land, unnecessarily increasing the cost of infrastructure provision through additional land purchase costs. To overcome this mitigation</p>



	measures should as at source treatments and noise walls should be promoted in advance of the use of set-backs.
8 Definitions	<p>The proposed definition of noise sensitive land uses includes a wide variety of uses, some of which may be attracted to road side locations and may actually generate significant noise themselves such as places of worship and child care premises.</p> <p>The Institute suggests that the definition of noise sensitive uses may be better placed in the Guidelines where it can be more easily amended, should the implementation of the Policy prove to be problematic.</p>
Implementation Guidelines	
2.2 Schemes and Amendments, Structure Plans and Activity Centres	The final paragraph of this section states that Appendix 7 sets out model Special Control Area provisions, however this section relates to placing notifications on titles.
2.4 Road and Railway Construction Proposals	Whilst this section notes that <i>“it is imperative that service providers contribute to minimising the generation and emission of noise”</i> the Institute is concerned that they are not compelled to do so, undermining the Policy.
Table 1: Policy measures and implementation at different planning stages	<p>Reference is given in Table 1 to <i>“incorporating noise mitigation measures, as appropriate, into Developer Contribution Plans”</i>. Noise mitigation measures are not included in SPP 3.6 Development Contributions for Infrastructure and therefore this reference should be removed.</p> <p>Along with other references, the table states that <i>“Department of Water and Environmental Regulation - Provide expert technical advice primarily in relation to Noise Management Plan and the effectiveness of performance-based recommendations.”</i> The Institute queries whether DWER is properly resourced to provide such advice within the applicable planning timeframes and with cognisance of the planning system. It is also important that DWER staff have appropriate delegated authority to provide advice, formal and informal, without executive supervision.</p>
Table 2	Table 2 is based on the assumption that road speeds of 110km/h for freight roads and 80km/h for primary and secondary roads. However within the Metropolitan area, the freeways are restricted to 100km/h and there are very few primary or secondary roads that have speed limits of 80km/h. As such the noise assumptions which are based upon traffic movements appear to be seriously flawed, particularly for Metropolitan Perth.





<p>3.4.1 Noise reductions from existing screening buildings and structures</p>	<p>Figure 4 and 5 should be clearer about how screening can be used between buildings, other than single storey residential.</p>
<p>3.5 Noise Management Plan</p>	<p>The section notes that if development is occurring prior to the construction of a road or railway, the developer should seek details of the infrastructure design and develop a joint Noise Management Plan. However, the Institute queries why infrastructure proponents do not make this information freely available rather than requiring developers to seek this information?</p> <p>The section goes on to state <i>“the proponent should be tasked with ensuring that what is designed and constructed remains consistent with the noise management plan”</i>. The Institute queries why this is the case, surely the decision making body should be responsible for ensuring compliance.</p>
<p>4.1 Physical separation and compatible land uses.</p>	<p>Whilst separating future route alignments from noise sensitive land uses may help achieve noise management outcomes, it is contrary to many other planning objectives and projects such as Metronet.</p> <p>The section refers to mixed use developments, community and recreational facilities as non-noise sensitive land uses. This contradicts the Policy’s definition of noise-sensitive uses which includes educational establishments, child care premises and other community and recreational facilities.</p> <p>Section 4.1 of the Guidelines makes reference to the use of <i>“defined easements”</i> as a means of enforcing setbacks, and that the local government should be the vesting or management authority. The intention behind use of the term <i>“easements”</i> in this context is unclear. The term <i>“reserves”</i> is used later in the paragraph, and in practice this is likely to be the most appropriate form of tenure for a setback area vested in or managed by the local government.</p>
<p>4.4 Building Design and Configuration</p>	<p>The positioning of noise-sensitive spaces away from noise sources should not be considered in isolation and also be balanced against other relevant considerations such as solar access, privacy and crime prevention through urban design.</p>
<p>Figure 16</p>	<p>For clarification, it would be useful if Figure 16 included an example that related to curve, particularly a tight curve such as a freeway on/off-ramp, or roundabout and how this affects determining building face orientation.</p>



Table 3 Quiet House Package C	The Institute queries why the outdoor living areas standard for Quiet House Package C is of a lesser standard than that of package A and B?
Appendix 1: Noise Exposure Forecast Worksheet	Step 6 Screening, permits the drop of 4dB if development is screened, however the Institute queries whether multiple 4dB drops are permitted where proposals are screened by multiple developments?
Mapping	
	To help improve the implementation, UDIA suggests that the mapping and traffic modelling should be consolidated into a single source rather than having to refer two different sources.
	The crude nature of the mapping is perhaps demonstrated by the fact that the mapping shows the Graham Famer freeway tunnel as being a source of primary road noise despite the fact that it is sunken beneath the ground.