FREIGHT AND LOGISTICS COUNCIL OF WESTERN AUSTRALIA

BULLETIN

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INTRODUCTION

This Bulletin looks at the operation of the Western Australian Planning Commission's (WAPC) State Planning Policy 5.4: Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP 5.4) with particular regard to freight rail.

The Freight and Logistics Council of Western Australia (FLCWA) is concerned to ensure efficient supply chains in Perth and regional centres across Western Australia, as the strength of the State's economy depends strongly on external trade.

SPP 5.4 has a central role in protecting road and rail freight and logistics infrastructure which are the backbone of the State's economic supply chains. The policy also seeks to ensure that the amenity of residential areas along freight corridors is protected, and it sets out noise criteria that apply to new noise-sensitive development to ensure that people are protected from unreasonable transport noise.

As a State Planning Policy, SPP 5.4 has the highest importance in the W.A. planning system. The WAPC and local governments must have 'due regard' to the provisions of state planning policies when preparing or amending local planning schemes and when making decisions on planning matters.

The WAPC has also prepared the Implementation Guidelines for SPP 5.4.to assist in the interpretation and application of the policy. The Guidelines, which are currently under review, provide supporting information on identifying, assessing and managing transport noise impacts. SPP 5.4 and the Implementation Guidelines can be downloaded here: **http://www.planning.wa.gov.au/publications/1182.asp**

THE IMPORTANCE OF STATE PLANNING POLICY 5.4 - ROAD AND RAIL TRANSPORT NOISE AND FREIGHT CONSIDERATIONS IN LAND USE PLANNING

The operations of freight rail and road corridors can be adversely impacted by urban encroachment. Strategic land use planning and development proposals in close proximity to corridors must consider and comprehensively address both current and forecasted freight activity.

Without this occurring, there is a risk it could lead to operational restrictions on freight movements, which plays a fundamental role for our State's industry and the economy. The effective implementation of SPP 5.4 is therefore critical.

THE IMPORTANCE OF SPP 5.4 AS WA'S CITIES AND TOWNS GROW

Freight rail noise is fundamentally different in character to road noise and in the view of FLCWA requires particular attention. As the intensification of urban areas continue, there is a greater potential for more people to be adversely affected by the operations of the freight rail network.

Maps prepared by the Department of Transport (DoT) illustrate the expansion of urban development along Perth's freight rail corridors between the period of 1984 and 2014.

Refer to Figure 1: Urban Interfaces Between Freight Rail & Urban Development 1984-2014. Source: Department of Transport

The maps shows that the freight rail corridors are being increasingly exposed to potentially sensitive land use, making them vulnerable to operational restrictions. Conversely the amenity of these expanding residential areas along these corridors may be being appreciably compromised.

Freight rail lines are essential economic infrastructure for the State's prosperity. Urban growth pressures can pose a serious risk to their efficient operation. The FLCWA seeks to ensure freight corridors are protected from encroachment by incompatible land uses, so that amenity impacts from noise and vibration, as well as safety risks are avoided.

State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning

The objectives of SPP 5.4 are to:

- balance urban amenity and economic efficiency;
- protect people from unreasonable levels of transport noise by establishing a standardised set of criteria to be used in the assessment of proposals;
- protect major transport corridors and freight operations from incompatible urban encroachment;
- encourage best-practice design and construction standards for new development proposals and new or redeveloped transport infrastructure proposals;
- facilitate the development and operation of an efficient freight network; and
- facilitate the strategic co-location of freight handling facilities.

The Policy advocates for the separation of sensitive land uses from freight routes as the most effective means to manage impacts. However separation is not always a realistic outcome. Therefore alternative measures such as noise mitigation are provided for.

The provisions of the Policy apply to:

- Proposed noise sensitive development in the vicinity of existing or future major road, rail or freight handling facilities;
- Proposed new rail or road infrastructure projects in the vicinity of existing or future noise sensitive land use; and
- Upgrades to existing infrastructure in proximity to noise sensitive land uses, and any new freight handling facilities.

As intensification of urban land continues, the FLCWA considers the effective application of SPP 5.4 fundamental to achieve informed strategic land use decisions and practical development outcomes.

The FLCWA has previously raised its concerns regarding a number of strategic land use planning and development proposals abutting existing freight rail corridors, and the need to protect freight infrastructure and its unencumbered operation now and for the future.

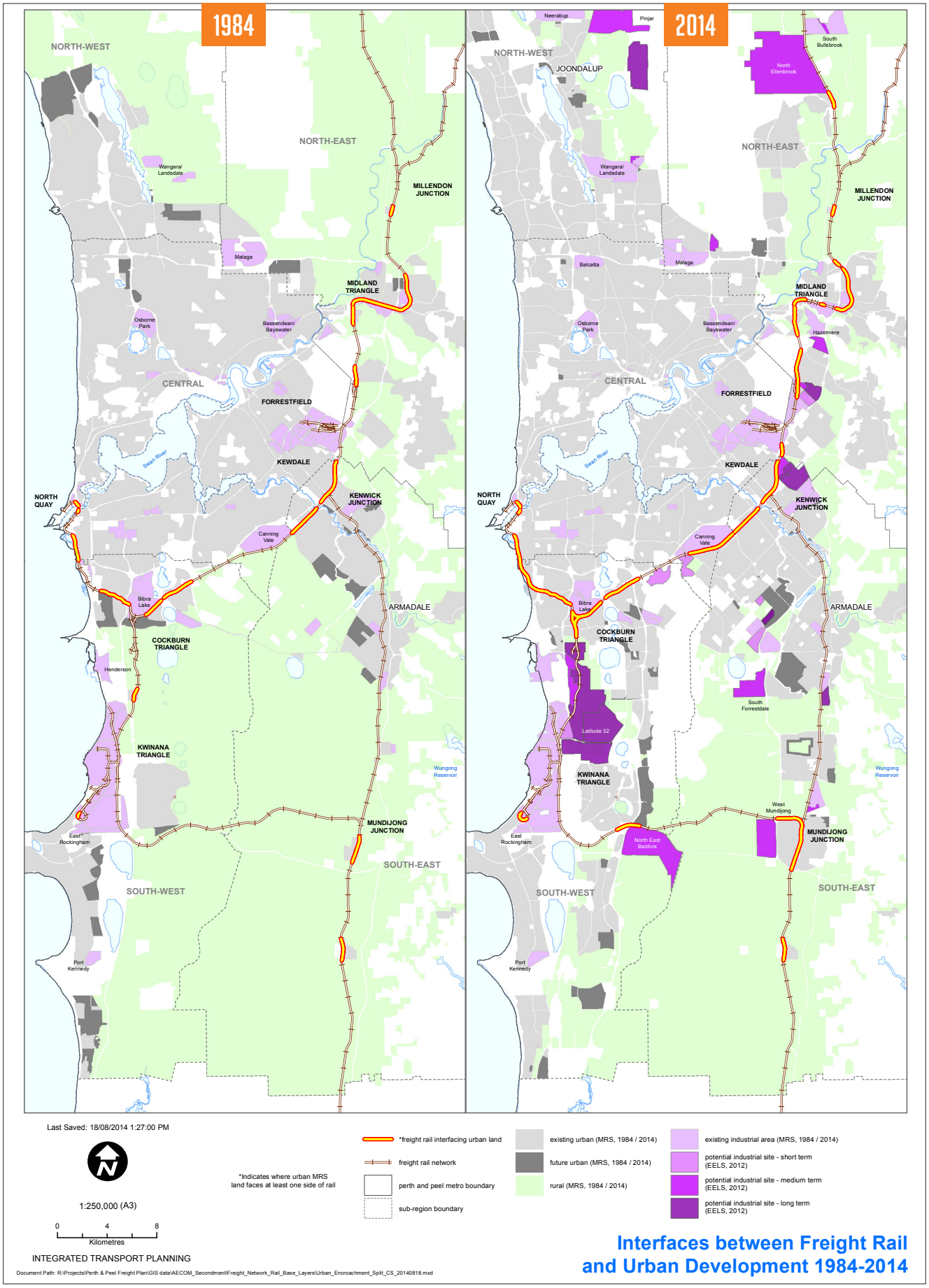

Figure 1: Urban Interfaces Between Freight Rail & Urban Development 1984-2014. Source: Department of Transport

STATE PLANNING POLICY 5.4 WORKSHOP

The FLCWA held a government and freight industry workshop in mid-2014 to raise the awareness and understanding of SPP 5.4 and consider any issues that may be preventing full compliance with the objectives of the policy from State and Local Government perspectives.

The following provides an overview of the responses received from workshop participants to a series of key questions regarding the Policy:

Considered Importance of SPP 5.4

a) SPP 5.4 is a State-level approach intended to provide for consistency, rather than multiple local government responses. It provides statutory guidance and certainty to:
   - local government;
   - developers; and
   - community.

b) It is vital to the economy of Western Australia as it 'future proofs' essential freight infrastructure.

c) SPP 5.4 is the principal mechanism to protect freight corridors from encroachment and incompatible land uses.

d) It protects both residential health and amenity and the freight infrastructure of freight corridors and freight terminals that are vital to the State's economy.

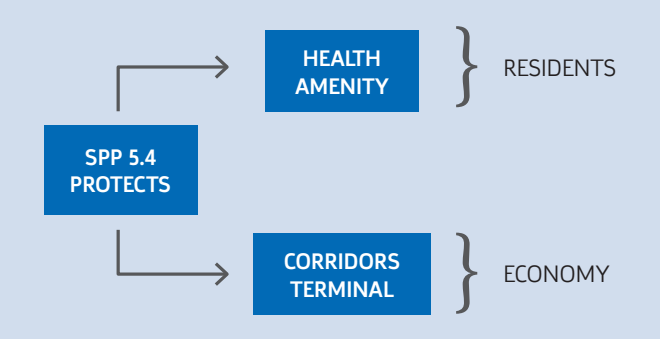

Figure 2: SPP 5.4 has a challenging task to protect urban amenity whilst achieving economic efficiency

Perceived Challenges for SPP 5.4

a) SPP 5.4 is seen by stakeholders as complex and not clearly understood. It is considered:
   - to be effective from a strategic perspective, but difficult to implement through the statutory planning system; and
   - to have a presumption of avoiding conflict but has mostly been used to manage conflict – is it protecting new housing or freight and logistics?

b) Implementation concerns were expressed as follows:
   - there is patchy implementation across local governments;
   - a low level of awareness by 'mum and dad' developers, and larger developers find ways to 'work around' the policy; and
   - structure planning and broad zones often defer the detail to the next level of planning, with compliance being pushed down to subdivision and development where it is too late to eliminate fundamental land use conflicts.

The workshop confirmed that SPP 5.4 has a challenging role to play within a competing State Planning policy framework. With other State Planning policies driving urban consolidation and increased densities, SPP 5.4 is required to protect the urban amenity of our communities from major transport corridors and freight operations while also protecting these corridors from incompatible urban encroachment. This is not any easy task.

It was concluded by the workshop that improvements should be made to assist in its effective implementation from the 'top' through strategic planning to the 'coalface' through structure plans, subdivision and development. This includes potential improvements in the presentation and content of technical information on noise and vibration, making it clearer for planners and developers to ensure the consistent application of the policy.

REVISED IMPLEMENTATION GUIDELINES FOR SPP 5.4

On behalf of the WAPC, the Department of Planning (DoP) is revising the SPP 5.4 Guidelines to improve their clarity and practical application for planners and other professionals implementing the transport noise policy.

MANAGING FREIGHT RAIL NOISE IMPACTS – GUIDANCE FOR PLANNERS, OWNERS AND DEVELOPERS

The FLCWA has identified an opportunity to make SPP 5.4 more useable for freight rail noise impact assessments.

Freight rail noise differs from road noise as trains pass by intermittently, rather than in a constant traffic flow. The noise as a freight train approaches builds and peaks as the train passes and can comprise wheel squeal on track curves, engine noise (particularly as trains travel uphill) and wagons banging as trains slow down.

For freight rail traffic, noise levels for the day and night periods (LAeq,day, LAeq,night) are assumed equal to reflect the 24 hour nature of operations.

The FLCWA is currently developing a guidance document called Managing Freight Rail Noise Impacts – Guidance For Planners, Owners and Developers which will be the subject of a forthcoming Bulletin. The proposed guidance is being prepared to provide practical guidance to planners, owners and developers to identify, assess and manage the potential impacts of freight rail line operations on noise sensitive developments. In particular, the proposed guidance document aims to define and address the:

- unique characteristics of freight rail noise; and
- planning stages for freight rail noise assessments and management.

Planning Stages for Freight Noise Assessment and Management

There are two key land use planning stages in which noise sensitive development can be considered when potentially affected by rail freight noise:

1. Strategic Planning Stage in which land use plans are made and implemented through the planning system; and
2. Subdivision And Development Stage through which on-ground development is designed and approved.

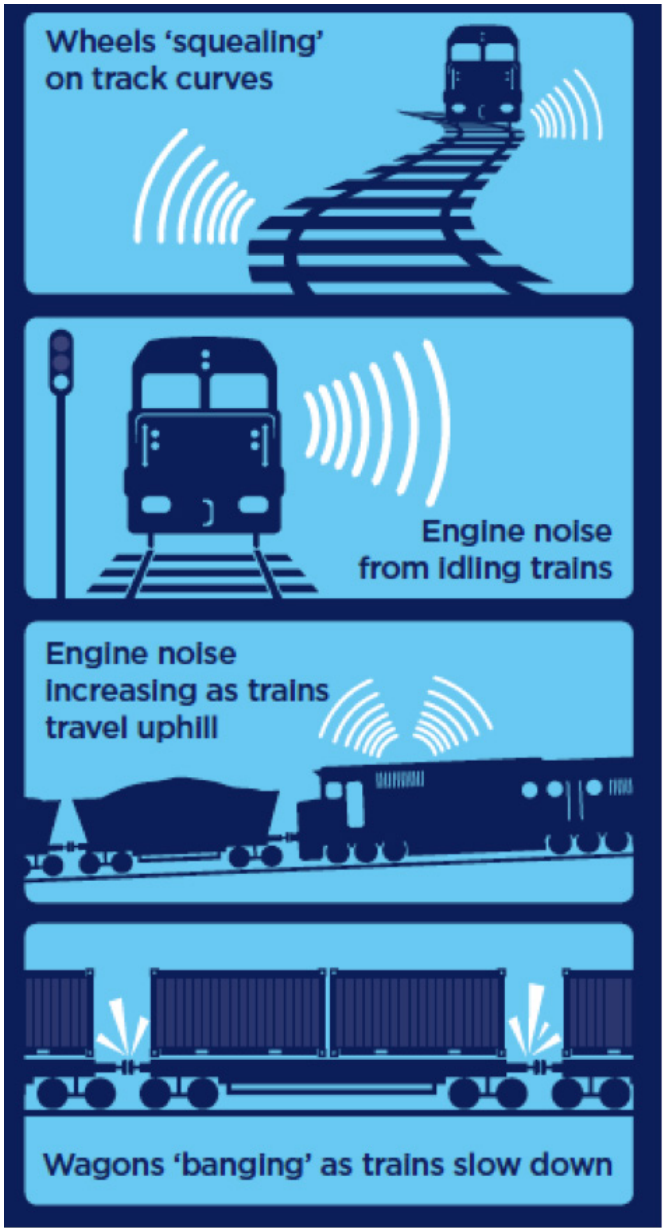

Figure 3 Common types of freight rail noise – from Fixing Freight Rail Noise, NSW Government, Transport for NSW

1. Strategic Planning Stage

The strategic planning stage is important to ensure that major freight rail corridors and rail freight operations are protected from incompatible urban land uses. It is important to identify and address land use conflicts early in the planning process.

The planning stage includes:

Strategic Planning Stage	Scale	Statutory Basis	Steps in SPP 5.4 Guidelines
• Region Schemes and amendments • Sub-regional strategies/ plans and other state initiated documents	• Multiple local government areas: • regional • sub-regional	• Plans must have due regard to SPP 5.4	1. Screening Assessment to identify potential noise sensitive development areas within 300 metres of freight rail lines. 2. Review land use compatibility - consider appropriate land use configuration and housing layout and density. 3. If noise sensitive subdivision or development is proposed to proceed in noise affected locations, structure plan provisions should require a Noise Assessment and Management Plan.
• Local Planning Strategies • Local Planning Schemes and amendments	• Single local government area	• Plans must have due regard to SPP 5.4 • Guidance in sub-regional strategies/plans	
• District and local structure plans	• Several suburbs down to a single residential estate	• Plans must have due regard to SPP 5.4 • Provisions in Local Planning Schemes • WAPC Structure plan preparation guidelines – requires an analysis of the context and constraints, including transport noise.	

Wherever possible, noise sensitive development should be buffered by locating other non-noise sensitive land-uses such as business adjacent to existing and proposed road and rail transport infrastructure.

2. Development Stage

The development stage includes subdivision plans, local development plans and development designs prepared by proponents and approved by a relevant planning authority.

They include:

Development Stage	Scale	Scope to address
• Subdivision applications • Local Development Plans	• Hundreds of lots or less	1. Consider subdivision layouts that address transport noise impacts; for example, allotting non-sensitive land uses, road reserves and open space to increase separation, lower density residential uses closest to the railway line etc. 2. Indicate required noise mitigation measures.
• Development applications	• Individual lot or several lots	1. Quiet house design measures such as living areas furthest from noise source, continuous external noise walls. 2. Indicate required noise mitigation measures.

Where noise sensitive development near freight rail corridors and freight operations cannot be precluded, noise levels should be planned to be mitigated to meet the SPP 5.4 Guideline noise target through subsequent subdivision and development.

PROVIDING A LOCAL CONTEXT - LOCAL PLANNING POLICY

In addition to the suggested freight rail guidelines, the FLCWA sees value in local governments preparing their own local planning policies based on the provisions of SPP 5.4, while providing a local context. Local government planners have the opportunity to prepare policies that considers freight corridors and industrial land destinations in their locality, together with addressing the specific spatial, land use, and built-form attributes of their local environment. In addition forecasts of future, local freight road and rail volumes (up to 20 years into the future) would assist with the forecasting of noise which will affect adjacent land uses in future decades.

The FLCWA is encouraged to see the City of Gosnells and the City of Greater Geraldton have already taken this initiative. These documents can be downloaded here:

City of Gosnell's Assessment Tool

City of Greater Geraldton Local Planning Policy

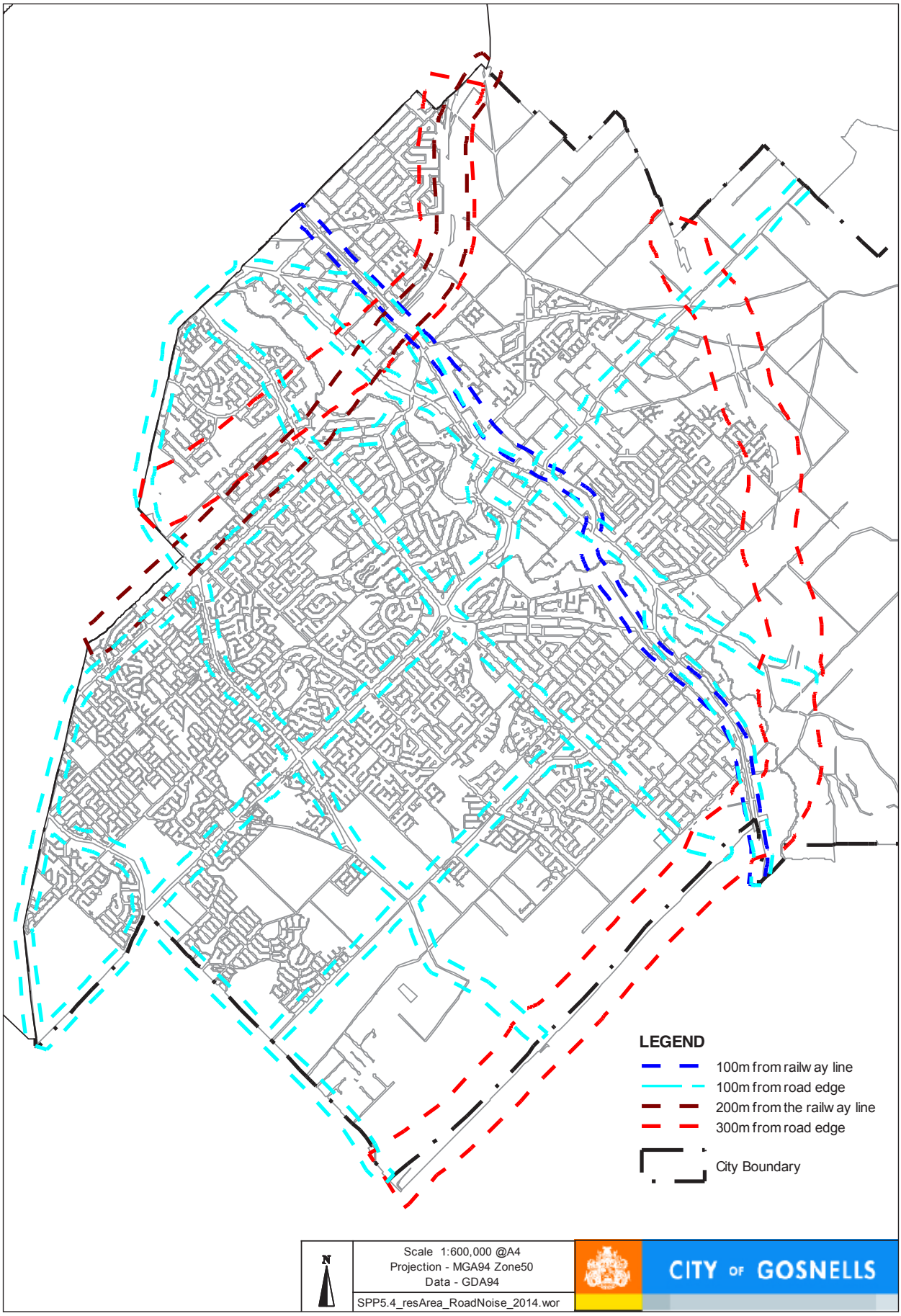

Figure 4: City of Gosnell's rail and road corridor mapping, showing where properties may be affected by the provisions of SPP 5.4, Source: City of Gosnells Assessment Tool.

Further information:

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REFERENCES:

Department of Transport (WA), 2014. Urban Interfaces Between Freight Rail & Urban Development

Responsive Environments, 2014. Managing Freight Rail Noise Impacts. Guidance For Planners, Owners and Developers (Draft)

Transport for NSW, 2014, Fixing Freight Rail Noise – Strategic Noise Action Plan