

Submission to The House of Representatives Standing Committee  
on Transport and Regional Services

# **Inquiry into the Integration of Regional Rail and Road Freight Transport and Their Interface with Ports**



## **Esperance Joint Submission Team**

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## **Purpose**

The Esperance Joint Submission Team (EJST) consisting of the Esperance Port Authority, Shire of Esperance and the Goldfields Esperance Development Commission makes this submission. The submission is in response to a request from the Standing Committee on Transport and Regional Services in relation to its inquiry into the *Integration of Regional Rail and Road Freight Transport and their Interface with Ports*.

## **Esperance Joint Submission Team**

This submission is made jointly by the Shire of Esperance, Esperance Port Authority and Goldfields Esperance Development Commission as freight transport issues affect the whole community and can only be tackled with the full cooperation of all bodies.

The Esperance Port Authority is a self-funded agency of the Government of Western Australia, operating under the Port Authorities Act 1999. The Port has grown significantly in the last decade. It has become the largest nickel concentrate exporting Port in the southern hemisphere, and with the completion of a \$54 million Port upgrade project in February, 2002, Esperance became the deepest Port in southern Australia, capable of handling Cape Class vessels up to 180,000 tonnes, as well as fully loaded Panamax class vessels up to 75,000 tonnes. As a result of this development, iron ore exports through the Port are expected to total more than 8 million tonnes annually in 2006. The Port is also a major grain-exporting hub and handles bulk imports such as fuel and fertilisers. It employs over 80 people with major flow-on effects to the regional economy.

The Shire of Esperance is located on Western Australia's southeast coast, about 725km from Perth. The Shire has an area of 43,000 sq km, giving the Region one of the lowest population densities to be found anywhere. It extends from Munglinup to Israelite Bay and north to within 50km of the Eyre highway turnoff at Norseman. It includes over 400km of coastline, which ranges from gently undulating bays and picturesque islands of the Recherche Archipelago, to the spectacular cliffs of the Great Australian Bight. Esperance has a strong working community and this is reflected in the huge achievements made to date.

The Goldfields Esperance Development Commission (GEDC) is a Western Australian State Government agency committed to encouraging and promoting economic and social activity in the Goldfields-Esperance Region of Western Australia and was established under the Regional Development Commissions Act (1993).

The Goldfields Esperance Region is of major importance to the Australian economy. A report by ABARE in 2002 said that the Goldfields Esperance Region had the potential to be the major exporting Region in Western Australia but was limited by a lack of infrastructure.

## SUMMARY OF ISSUES AND RECOMMENDATIONS

The Port of Esperance serves the mineral rich Goldfields Esperance Region of WA. The Port is experiencing major growth because of the boom in iron ore sales to China, record grain harvests, new products and the development of a large laterite nickel mine by BHP Billiton at nearby Ravensthorpe (RNO). The Port has been recently upgraded with improved dredging to take Cape Class vessels, a new berth and new storage sheds, however the associated rail and road networks have not been upgraded to match, the significant increase in handling products.

**We believe that Esperance is an important export Port and should be depicted on the AusLink National Land Transport Network** and that the access corridors to Esperance not be precluded from Commonwealth funding opportunities. The inclusion of the Esperance Port is warranted because we have an export-focused economy consisting of agriculture and resource extraction products. At present WA only receives 16% of Auslink funding.

**Improvements to the Port access corridor** are necessary to improve safety, local amenity and efficiency of Port-related traffic. Suggested remedies include **grade separation** of road and rail at significant intersections, noise attenuation, **upgrading main access road** to dual carriageway, improving gradients and **duplicating the rail line**.

The standard gauge rail line from Kalgoorlie to Esperance, the only standard rail link to a regional port in southern WA, is leased to WestNet Rail, a subsidiary of Australian Railroad Group (ARG). The sole rail operator is also ARG. Anecdotally, this has resulted in:

- Limitations in Investment in Rail Infrastructure (eg sidings);
- Lack of adequate rolling stock for grain (leading to overuse of road network and costs pushed to local government); and
- Competitive advantage to ARG (owner of terminals, depots and above rail assets).

Suggested remedies include **transfer of lease of rail line** and affiliated land to an independent body such as **ARTC** (Australian Rail and Track Corporation) together with a review of costing structures.

The Esperance Port Authority and the Shire of Esperance have made a strategic decision to create a new industrial park and freight hub 14km north of Esperance to allow for future growth. Headworks at the industrial park need to be funded, so that industries and freight handlers can be encouraged to support it.

**A common-user intermodal freight hub at Kalgoorlie** should also be examined.

The ability of the State to invest in regional infrastructure is limited and a national approach to infrastructure is needed. Owing to the geographical isolation of the Esperance Port and current lack of freight volumes, private companies are unable or unwilling to invest in new infrastructure. **A coordinated State/Federal approach to infrastructure would be welcomed.**

**The EJST would like the opportunity to meet personally with the Standing Committee and explain the pressing needs of the road and rail freight transport industry and their impact not only on the Esperance Port, but also the Goldfields Esperance Region.**

# 1. Introduction

The Esperance Joint Submission Team (EJST) is pleased to have the opportunity to make this submission to the Standing Committee on Transport and Regional Services on an *Inquiry into the Integration of Regional Rail and Road Freight Transport and Their Interface with Ports*.

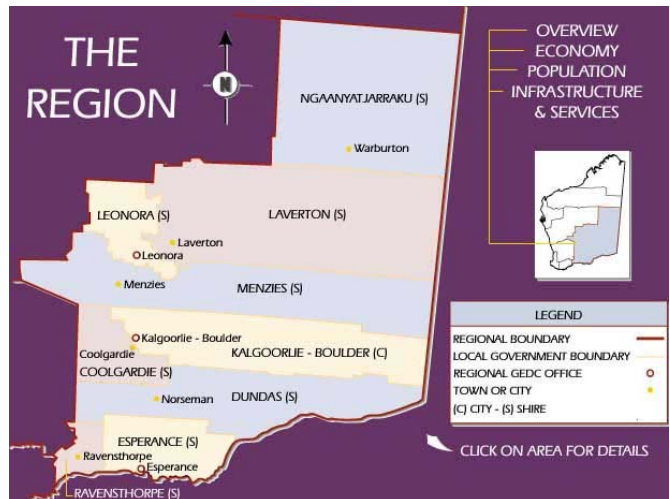
The EJST supports the inquiry and considers that community involvement in all stages of the planning process is critical to achieving outcomes.

# 2. Background

## 2.1 Regional Context.

The Goldfields – Esperance Region is situated in the southeast of Western Australia. It covers an area of over 940,000 square kilometres, approximately 37% of the State’s total area.

The Esperance area is a sub-region of the Goldfields located on the south coast of Western Australia approximately 730km from Perth. The Shire of Esperance has a current population of approximately 14,500 with almost 12,000 residing in the town of Esperance. It is estimated that the population of the Shire could reach 25,000 in the next 20 years. Esperance is the major Port that serves the Goldfields-Esperance Region.



Significant industries that contribute to the economy of the Esperance area are agriculture, mining, tourism, and fishing. The Port plays a strategic role in the Region’s transport network, predominantly exporting grain and minerals and importing other goods essential for supporting the mining and agriculture industries.

## 2.2 Existing Transport Network

### 2.2.1 Road

The South Coast Highway and the Coolgardie/Esperance Highway are the primary sealed road linkages to the Port.

The South Coast Highway is an important route that provides the most direct access to Perth and to southern coastal areas such as Albany and Bunbury. It also provides the direct link between BHP Billiton’s Ravensthorpe Nickel Operations and the Port.

The Coolgardie – Esperance Highway provides a direct link to the Goldfields including Kalgoorlie and north to Wiluna where a number of new mining projects are coming on stream. The Coolgardie – Esperance Highway also links the Region to the rest of Australia via the Eyre Highway at Norseman.

The Harbour-Ring Road (which is a part of the Coolgardie-Esperance Highway) is within the Port Access Corridor.

The Coolgardie – Esperance Highway and South Coast Highway are sealed single carriageway roads of varying widths, are part of Highway One, but are not in the Auslink Program.

The Shire of Esperance is responsible for maintaining and upgrading 4,500 km of roads connecting the agricultural area to the Port. The Shire has a strategic plan to address future transport-related impacts on these roads. However, given current funding levels, the road asset will deteriorate as expenditure is not meeting status quo costs. Reliance on road freight to deliver goods to the Port is also causing the road assets to deteriorate quickly, as well as compromise the safety of road users especially on school bus routes and in tourism areas.

A number of at-grade rail level crossings within the Esperance townsite create conflicts between road and rail traffic, which results in delays on the road network and inherent safety problems. Level crossings are located on both the South Coast Highway and the Coolgardie-Esperance Highway on the approaches to Esperance. Seven major at-level rail crossings are located within 14km of the Port.

Over two million tonnes of grain are carted by road to the Esperance Port every year, which places an enormous stress on the road network.

Currently all fertiliser products are transported by road from the Port to bulk storage sheds within the townsite. Approximately 25% of fuel is transported by road from the main storage tanks in town to farms in the district and north to Norseman and Kalgoorlie. From 2007, 500,000 tonnes of prill sulphur and 40,000 tonnes of magnesia per year will also be transported from the Port by road to the new BHP Billiton Nickel Mine at Ravensthorpe.

Products currently being transported by road to the Port are nickel concentrate (about 50% of the total exported through the Port) and grain. Woodchips will also be transported to the Port as soon as 2007.

## 2.2.2 Rail

The rail network provides a single standard gauge rail line between Esperance Port and Kalgoorlie where it links with the east-west rail line and the Northern Goldfields Line. A single spur line within Esperance provides access to the bulk grain storage and bulk fuel depots.

The products currently being transported to the Port by rail are iron ore, grain, lead and nickel. In the future, rare earths, zinc, and copper will also be transported to the Port by rail. Products railed to the Goldfields include 75% of the total petroleum products imported through the Port.

The State Government leases the rail line to WestNet Rail, a subsidiary of Australian Railroad Group (ARG), which is currently the only rolling stock operator on the line.

Currently 300,000 tonnes of grain is transported to the Port from Grass Patch and Salmon Gums (100km north) by road despite these receivable points being located on rail sidings with full rail loading infrastructure. Rail should transport this grain, but because of timely transfer to meet shipping schedules, most of this is transferred by road.



*Figure 3 - ARG Locomotive hauling grain*

### **3. Future Industry Development**

#### **3.1 Containerised Freight**

Incoming and outgoing containerised freight will commence at the Port in 2007, once production commences at BHP Billitons Ravensthorpe Nickel Operations (RNO). A \$12 million crane is presently being secured in order for the Port to be able to handle containers.

#### **3.2 Mining**

A number of additional projects along with RNO are expected to be operational by 2007. These include Forrestonia, Trilogy and Kundip, all to the west of Esperance. These projects are expected to generate additional freight.

#### **3.3 Pulpwood and Grain**

Bluegum timber plantations are being developed close to the coast to the east and west of Esperance, with harvesting expected to commence in 2008. It is envisaged that 300,000 tonnes of pulpwood will be produced annually and exported through the Port to Asia where it will be made into paper pulp. Current planning is to use field harvesting and chipping operations at each plantation. The product will be transported directly to the Port by road in 40 tonne semi trailers.



Esperance continues to be an important grain-exporting centre. Improvements in technology and practise has seen constant growth in tonnages shipped, and over 3 million tonnes will be exported by 2010, subject to seasonal conditions.

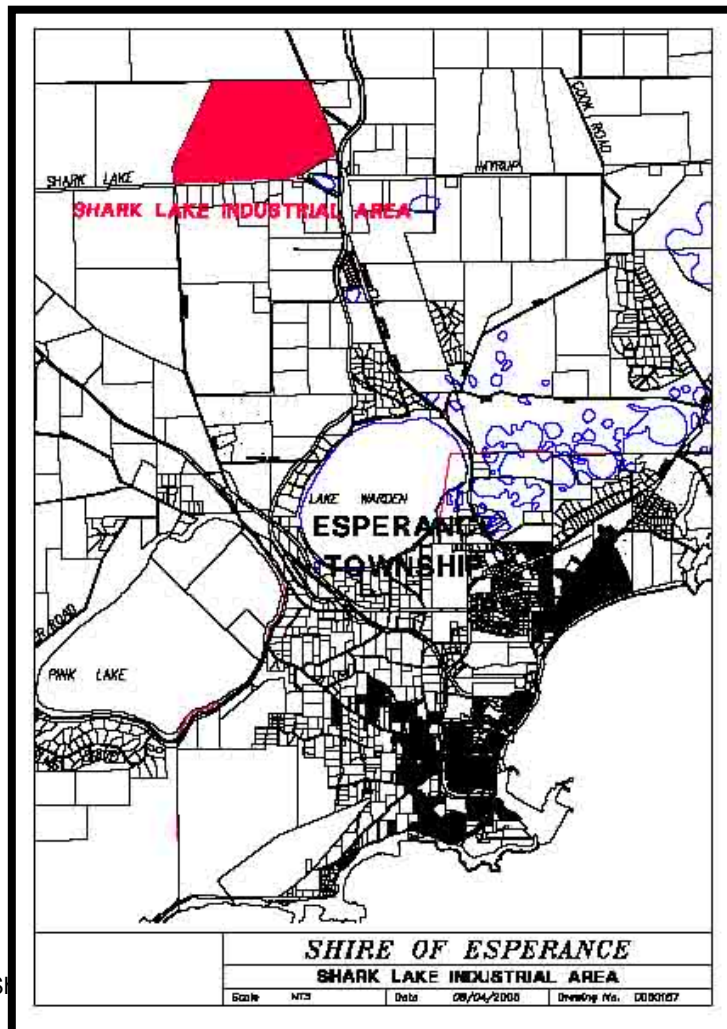
### 3.4 Shark Lake Industrial Park

The Shire of Esperance and the Esperance Port Authority have adopted a strategic approach in relation to the development of land for an industrial park. The Shark Lake site has been chosen with particular reference to transport links and will be the regional intermodal transport hub. It is also adjacent to the natural gas pipeline, which supplies gas to Esperance from the North West Shelf.

The new Shark Lake Industrial Park is 14 km north of Esperance on the Coolgardie-Esperance Highway and covers 383 hectares. Adjacent to the site is the junction of Shark Lake and Myrup Roads, key feeder routes from the west and east, and the rail line linking the Goldfields with the Port.

A rail spur to the adjacent rail line is proposed to facilitate inter-modal transport opportunities from the Industrial Park to the Port.

A portion of the site is currently used by CBH for grain storage. The Port has plans to use a section of the park as a transhipment site for bulk materials in the future when Port land is limited or unavailable, whilst the remaining land will ultimately be sub-divided into light and general manufacturing industrial lots.





It is anticipated that, subject to final planning and rezoning approvals, the park will be progressively developed over the next few years with the pace of development being driven by demand and available infrastructure funding opportunities.

### **3.5 Esperance Townsite Foreshore Redevelopment**

A Master Plan is being prepared to guide the enhancement and future development of the Esperance Townsite Foreshore. The overall objective of the project is to assess the development potential of the Esperance Foreshore having regard to social, environmental, cultural, recreational, tourism and economic needs and opportunities, including assessment of key issues in relation to the Port Authority lands and the Esperance Tanker Jetty.

The area under consideration extends from the Port eastward through to Castletown Quays beach and extends landwards to Dempster Street. The relocation of industries such as CBH, CSBP, fuel facilities and Water Corporation sewage treatment works from their central location close to the foreshore to more suitable sites inland is being considered as part of this project.

### **3.6 Residential Development**

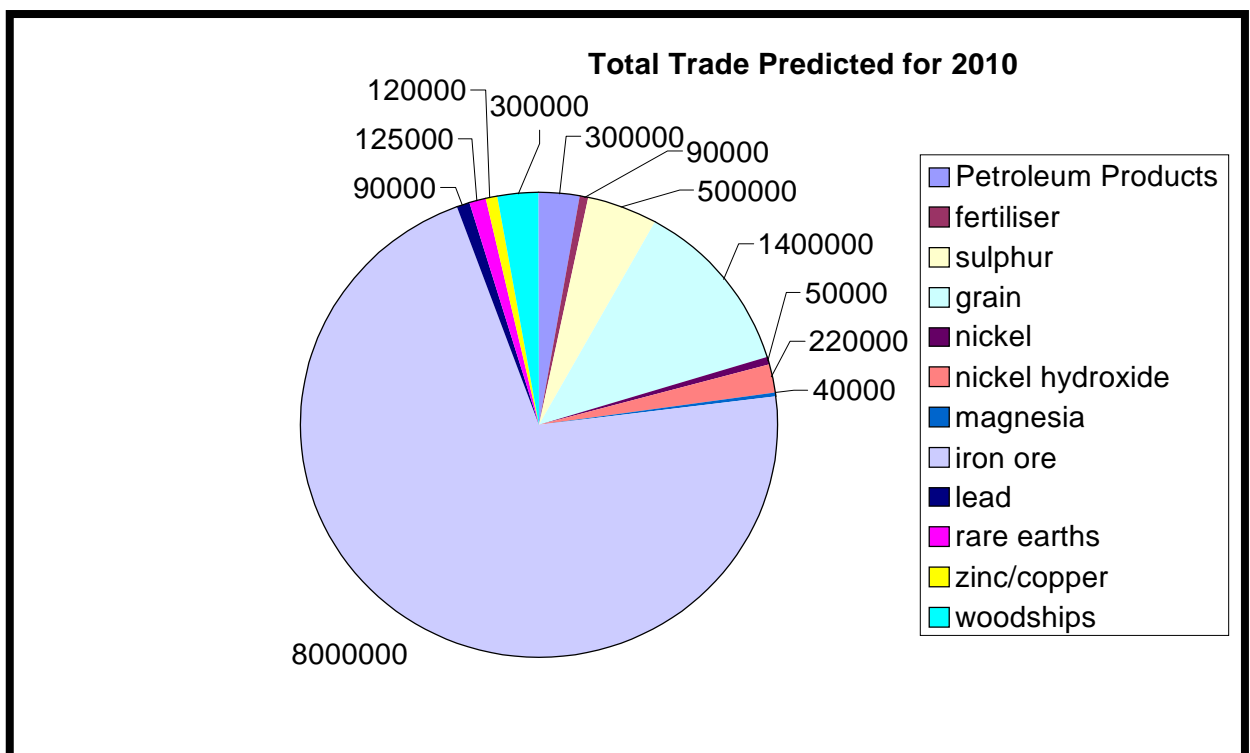
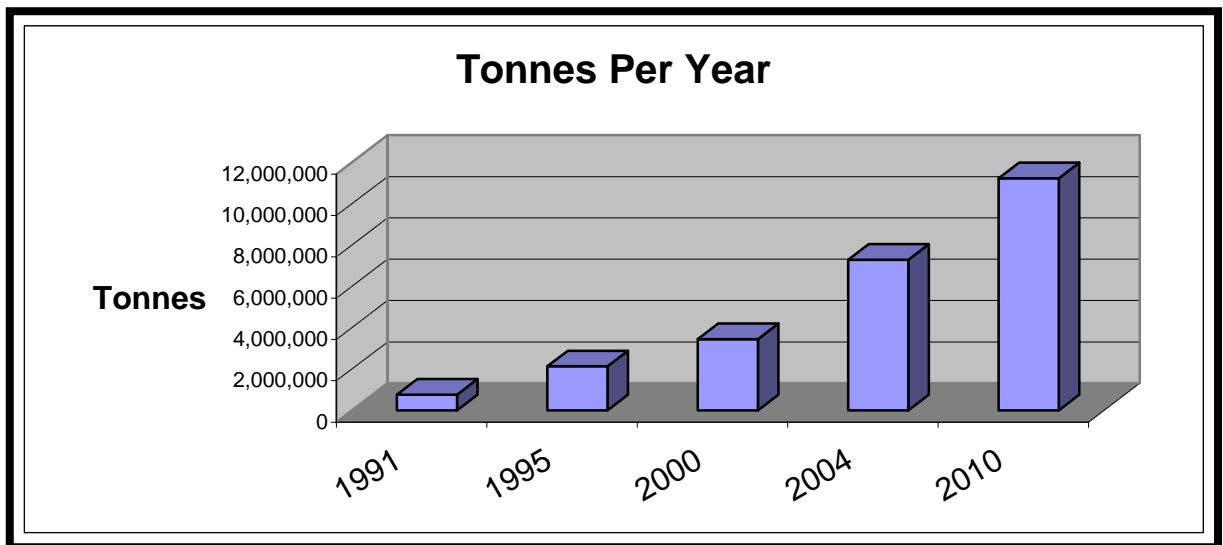
Esperance is forecast to have a rapidly growing population, on both sides of the Port Access Corridor. This will necessitate the need for grade separation of road and rail traffic increases.

Large areas of land zoned for urban development are available throughout the townsite, and considerable developer interest in the Shire is being driven by real and expected growth of Esperance as the centre for employment and industry.

With the population of Esperance expected to continue to grow on both sides of the Port, grade separation of road and rail is necessary as the volume of traffic increases.

## 4.0 PORT INTERFACE ISSUES

Product moved through the Esperance Port has increased significantly from approximately 750,000 tonnes in 1991 to more than 7,200,000 tonnes in 2004. The projected tonnage for 2010 exceeds 11,200,000 tonnes. While the Port facilities have been upgraded to cope with this growth, the supporting rail and road transport corridor facilities have not.



#### 4.1 Competitive advantage to Australian Railroad Group

Australian Railroad Group (ARG) subsidiary WestNet Rail has a 49-year lease on the State Government-owned rail corridor land, track and infrastructure, and is required to provide 'open access' to other rail freight operators under a legislated regime. Another ARG subsidiary, Australia Western Railroad, purchased Westrail's freight assets including rolling stock, terminals, and customer contacts, and provides the 'above rail' delivery services to clients in the mining industry in the Region.

ARG is struggling to cope with the demands of maintaining the current rail network and provide for additional infrastructure. National funding does not support these major standard gauge arterial rail lines.

Currently 80% to 95% of grain is transported to the Port by road. This is not the desired option where mining and tourism are both growth industries in the Region and the use of the road network is ever increasing. The rail line is not being used as effectively as it could be at peak grain haulage times.

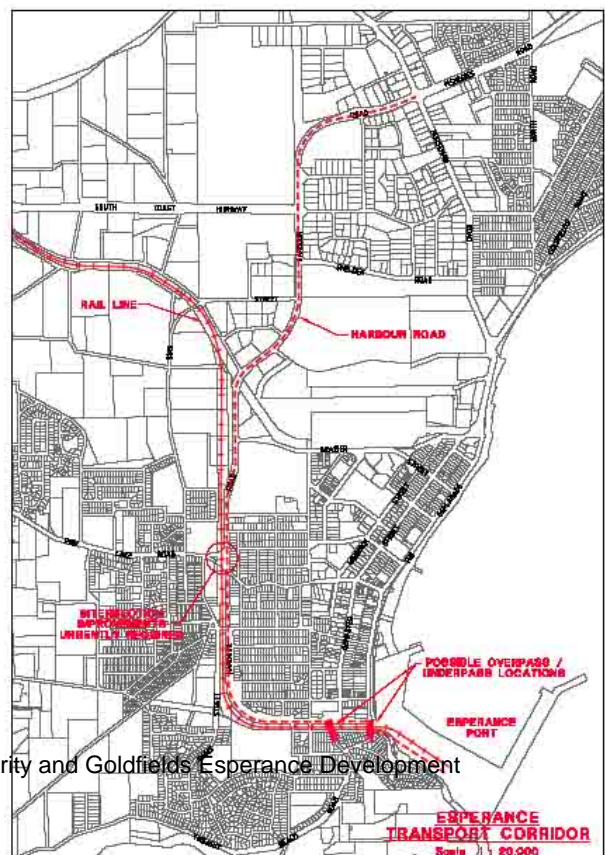
The feasibility of increasing the length of rail sidings between Esperance and Kalgoorlie is currently being undertaken to facilitate longer iron ore trains on this rail link. Major works are currently at approval stage, including improvements to the marshalling yards in Esperance to accommodate the longer trains. The longer trains are being broken at the yard before being taken to the Port for unloading.

#### 4.2 Shark Lake Industrial Park - Rail Spur

A proposal to construct a rail spur line from the Kalgoorlie – Esperance Railway to the CBH grain storage facility at Shark Lake Industrial Park (14km north of the Port) has been mooted. However, it is currently unknown as to when this will be implemented because of a lack of funding and commitment from the government to expand rail infrastructure. This rail spur could also service additional industries at the Shark Lake Industrial Park including the Port, which controls approximately 1/3 of the subject land.

#### 4.3 Esperance Port Access Corridor

The volume of traffic on the roads and rail leading to the Port will increase significantly in the near/immediate future. Substantial increases in rail traffic on the rail network to the Port is likely to have a significant impact on the *safety, amenity and efficiency* of existing railway level crossings within the Esperance Port Access Corridor.



Major studies have been undertaken and Town Planning Scheme Amendments have addressed the numerous issues involved with the Corridor. Currently the Port operates under a 24/7 operation and all parties have worked well together in an endeavour to protect the corridor using noise bunding, grade separation and other noise attenuation measures.

#### 4.3.1 Safety and Efficiency

The current layout of the Port Access Corridor has major problem areas in relation to safety (where 53.5m triple road trains cross railway lines near schools and major tourist areas) and efficiency (where traffic has to wait long periods while trains block level crossings).

A report was undertaken on behalf of the Shire of Esperance (ERM Mitchell McCotter) to deal with concerns regarding interactions of increasing road and rail freight, and residential and tourist traffic at various intersections. This report identified some deficiencies in the existing transport network and its operation.

Recommendations were presented for immediate implementation, along with recommendations requiring further investigation and consideration as they involved modifications to the network and significant funding requirements. Further investigations are currently underway, however funding sources for any identified improvements are limited at present.



*Figure 4 – Road Trains Approaching Level Crossing at Port Entrance*

#### 4.3.2 Amenity

The Shire of Esperance has undertaken a number of actions to improve the local amenity surrounding the Port Access Corridor. These include commissioning traffic studies, town planning scheme amendments and noise monitoring.

The main issues in relation to noise are train horns and truck movements (Lloyd Acoustics 2004). Trains currently must sound their horns prior to a level crossing. Grade separation (the crossing of a track by another track, roadway or pedestrian pathway at a non-intersecting elevation), would help alleviate the number of times that train horns must sound.

There will be ongoing noise monitoring and attenuation in line with increased usage of Port growth.

## 5.0 RECOMMENDATIONS

### 5.1 Funding of Grade Separation and Noise Attenuation

Improvements to the Port Access Corridor are necessary to improve safety, local amenity and efficiency of Port-related traffic. Suggested remedies include grade separation of road and rail at significant intersections and noise attenuation.

The project would aim to eliminate some railway crossings, reduce traffic delays and improve safety. Funding is needed to undertake a detailed investigation of options and associated issues to finalise the scope of the project. As part of the investigation, stakeholders, including residents, local businesses, the Department of Planning and Infrastructure, Westnet rail and ARG (rail operators), Esperance Port Authority, Main Roads WA and the Shire of Esperance will need to be consulted to identify any potential issues that need to be taken into consideration during the assessment of options.

### 5.2 Review Auslink

The AusLink National Network is based on national, regional and urban transport corridors, links to ports and airports, and intermodal connections between road and rail.

The Network is designed to link major centres and improve travel for people and freight. This is critical for national and regional economic growth and development.

We believe that Esperance and Kalgoorlie:

- have significant freight volumes;
- have a growing population and economic significance; and
- are export gateways.

**We request that the Kalgoorlie to Esperance Road and Rail corridor be placed on the AusLink National Network.**

### 5.3 Change of Track Managers

Cooperation between government and private sector operators is vital to maintain and upgrade the rail network. This group recommends that Aust Rail Track Corp (ARTC) acquire the rail line and associated infrastructure from Kalgoorlie to Esperance.

ARTC is responsible for interstate standard gauge networks. The Kalgoorlie to Esperance line is standard gauge and could be incorporated into the ARTC network.

ARTC would have the resources to undertake the necessary upgrades and to ensure that issues such as noise attenuation and grade separation are addressed. Better coordination of rail wagons would mean that the rail line from Kalgoorlie to

Esperance could be used more efficiently and all grain should be able to be transported by rail from the collection terminals to the Port.

#### **5.4 Shark Lake Industrial Park**

The new Shark Lake Industrial Park is being established 14km north of the Port and will provide an opportunity to collect road transport freight and transfer it to rail for the Port. This will reduce freight traffic through the Esperance Townsite and associated amenity and safety advantages.

Federal support is needed to provide headworks and other infrastructure such as a rail (perhaps through Regional Partnerships program). There is a need to encourage the use of rail and to expand the network and bring in more rolling stock.

#### **5.5 A New Kalgoorlie Intermodal Freight Hub**

The EJST supports and recommends that a common user intermodal Transport Hub be established at Kalgoorlie. Kalgoorlie has significant advantages as an intermodal transfer hub being strategically located in Australia's transport network. Kalgoorlie is situated at the junction of the north-south railway line from Leonora to Esperance and at the junction of the Trans-Australian east – west artery.

The hub should ensure that a common user intermodal freight facility is developed and managed to allow efficient and non-discriminatory access to all road and rail users. It should also deliver competitive charges to, and through efficiency gains, deliver long-term savings to facility users.

Initially, the facility may be quite small and only comprise, for example, heavy duty forklifts to transfer freight from rail to road vehicles and from road vehicles to rail wagons and a lay down area. Over time it is possible that the facility may need to expand to potentially include associated infrastructure necessary to support freight transfer facilities including road and rail access, warehousing, storage and distribution systems.



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## APPENDIX 1

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