



## **SUBMISSION ON PRODUCTIVITY COMMISSION ROAD AND RAIL FREIGHT PRICING INQUIRY**

**Prepared by officers at the Eastern Metropolitan Regional Council  
(EMRC), with input from member Council officers**

**May 2006**

### **BACKGROUND**

The EMRC is a regional Local Government established under the Western Australian Local Government Act 1995 and is comprised of the following member Councils:

- Town of Bassendean;
- City of Bayswater;
- City of Belmont;
- Shire of Kalamunda;
- Shire of Mundaring; and
- City of Swan.

The EMRC undertakes a range of services in partnership with the member Councils covering Regional Development, Waste Management, Environmental Management and Risk Management. One of the major Regional Development projects that the EMRC is currently facilitating is the Regional Integrated Transport Strategy (RITS), which considers all modes of transport including freight within the Region.

Information gathered to date as part of the RITS has indicated that freight movements is one of the most important factors that will require significant infrastructure investment and ongoing management to maintain acceptable road use and safety standards in the short, medium and long term. The RITS is expected to be completed in August 2006 and the report can be made available to the Inquiry if required.

### **PERTH'S EASTERN REGION – THE FREIGHT HUB**

Collectively, the member Councils in Perth's Eastern Region comprise one third of the Perth Metropolitan Area (2,100 km<sup>2</sup>) and include a population of over 300,000 people.

The Region is the hub of road and rail freight infrastructure and movement in the Perth Metropolitan Area which includes:

- The Domestic and International Airports;
- The major freight storage facilities being developed on Perth Airport land;
- The Kewdale Inter-modal Freight Terminal (undergoing major expansion);
- The main East-West Rail Freight line;

- National Highways including the Perth – Adelaide Highway (Great Eastern Highway (existing) and the proposed Toodyay Road Orange Route), Perth Darwin (Great Eastern Highway/Roe Highway/Great Northern Highway (existing) and future Reid Highway/Roe Highway/Lord Street (part of Swan Valley Bypass);
- Other major highways such as Leach Highway and Tonkin Highway; and
- Major roads including Guildford Road, Kalamunda Road, Welshpool Road and Kewdale Road.

The freight related infrastructure is a significant investment in the Region and there have been some adverse impacts on the member Councils and their communities including:

- Increased costs to member Councils on the construction, maintenance, upgrading, traffic control and planning for roads associated with, and in proximity of, freight facilities;
- Increased risk of accident severity and concerns from the community on co-existence of freight vehicles and passenger vehicles on highways and major roads;
- Reduced air quality associated with freight vehicle emissions and potential health impacts. This is exacerbated by the meteorological and topographical characteristics of the Region and current poor air quality conditions;
- Increased noise and amenity impacts resulting from freight vehicle movements.

Given the wide scope of the Productivity Commission's Road and Rail Freight Infrastructure Pricing Inquiry (the "Inquiry") and based on advice from key stakeholders, this submission has focussed on a number of key issues raised in the Issues Paper (March 2006) that are relevant to the member Councils and the Region, rather than comprehensively addressing all relevant areas related to freight infrastructure and pricing.

Officers from the EMRC and the member Councils would be interested in expanding upon the submission and other relevant matters at the Inquiry hearings proposed for October 2006.

## **KEY ISSUES FOR CONSIDERATION IN THE INQUIRY**

The key issues for consideration in the Inquiry mostly relate to road and rail pricing methodologies and externalities that have resulted in the member Council or their communities having to bear some of the costs of freight infrastructure and transport movements.

The key issues are outlined below and expanded upon in the following text.

- Methodology for assessing capital costs of road and rail infrastructure.
- Major externalities associated with Road and Rail freight infrastructure impacting on Perth's Eastern Region.
- Abatement measures for noise and traffic congestion to protect of residential amenity in the Region.

## **Methodology for Assessing Capital Costs of Road and Rail Infrastructure**

It is considered that there should be a common methodology for assessing capital costs of road and rail infrastructure using asset management principles contained in the International Infrastructure Management Manual published by the Institute of Public Works Engineering Australia (IPWEA).

## **Major Externalities Associated with Road and Rail Freight Infrastructure Impacting on Perth's Eastern Region**

The main externalities related to:

- Increased costs to member Councils for the construction, maintenance, upgrading, traffic control and planning for roads associated with, and in proximity of, freight facilities;
- Increased risk of accident severity and concerns from the community on co-existence of freight vehicles and passenger vehicles on highways and major roads;
- Reduced air quality associated with freight vehicle emissions and potential health impacts.
- Increased noise and amenity impacts resulting from freight vehicle movements.

Costs associated with the freight related externalities impacting on Local Government and their communities should be included in freight pricing wherever possible. It is recognised however that the ability to incorporate externalities and other costs into freight pricing may be limited in some cases and other forms of funding require investigation. For example, a significantly greater proportion of the fuel excise levy collected by the Federal Government could be used to assist Local Government and State Government fund freight related infrastructure.

It is understood that only a proportion of the Federal Government's fuel excise is being spent on road related issues, with the majority going into consolidated revenue for use on other areas. It is considered that this is inequitable and that the Federal Government needs to provide more transparency on income and expenditure in this area in order to disclose the amount collected from the fuel excise levy and the level of funding provided for road related activities. In case of the fuel excise applied to diesel, it is considered that the majority of this should be spent on freight related infrastructure as freight transport is one of the biggest users of diesel fuel.

### Increased costs to member Councils for the construction, maintenance, upgrading, traffic control and planning for roads associated with, and in proximity of, freight facilities

There are a number of roads in the Region managed by the member Councils that play an important role in supporting road and rail freight related transport. Although it is not possible to quantify these at this stage, it is expected that information to support this position will be included in the RITS report.

There are however specific examples that have been provided by the City of Swan that highlights this issue in relation to development on Perth Airport land, which is under Commonwealth jurisdiction. Under this situation, the City of Swan are unable to be provided with road and bridge upgrading contributions from freight movement

related projects associated with development on Airport land, such as the proposed Brickworks.

This situation also applies to past and proposed freight related developments in other member Council areas (Belmont, Kalamunda). Under State Government subdivision and development approval processes, it is possible for the Local Government to secure a contribution from the proponent for the cost of upgrades as a result of the development. In addition, some of the existing freight movements affect local roads that are currently not at the required standard to carry types and volumes of freight vehicles.

In terms of road planning for freight infrastructure and movements, Local Government needs to be recognised as a key stakeholder in the process and a potential beneficiary of related funding to support freight provision.

The Inquiry should determine how freight pricing can include the costs borne by Local Government for the planning, construction, maintenance, upgrading and traffic control for areas where their road network is impacted upon by freight movements.

Increased risk of accident severity and concerns from the community on co-existence of freight vehicles and passenger vehicles on highways and major roads

The member Councils received many complaints from their ratepayers regarding safety and congestion concerns related to freight movements. The RITS study being developed by the EMRC has identified a relatively high number of intersections with safety issues, compared to other areas of the Perth Metropolitan Region. These intersections are exacerbated by the large volumes of freight vehicles.

Freight movements are also a major determinant of traffic congestion in the Region to the point where several intersections (e.g. Horrie Miller Drive/Tonkin Highway/Kewdale Road, Great Northern Highway/Reid Highway/Roe Highway, Great Eastern Highway/Roe Highway) are virtually at a stand still during peak hours and road users are going to extraordinary lengths to avoid these areas, thereby transferring traffic impacts to other areas that are not designed for the increased volume and type of vehicles. During normal working hours, these intersections are also avoided by vehicles due to heavy congestion.

The congestion, traffic delays and increases in travel times creates adverse economic and social impacts for the Region related to productivity losses and driver frustration or “road rage.”

Significantly greater investment by the Federal Government on freight related infrastructure is required in Perth’s Eastern Region, given its national and state importance as a freight transport hub in Western Australia. The RITS report will identify priorities for freight related infrastructure investment in the region based on actual and modelled data. It is understood that the Perth Transport Authority has detailed information on the growth of freight infrastructure and movements for the Region and it is recommended that the Inquiry examine this information in support of this claim.

In addition to road freight, the main East-West rail freight line passes through Midland and Hazelmere to the freight terminal in Forrestfield, which are all located in the Region. There are many at grade crossing points associated with the freight line that have increased the safety risk and lead to traffic delays due to the extended length of

the freight trains (up to 1.75 kilometres long). The freight rail also creates excessive noise impacts, particularly in Hazelmere.

The Inquiry should determine how freight pricing can include the costs borne by Local Government and their communities related to increased risk of accident severity and traffic congestion associated with road and rail freight transport. The installation of grade separated interchanges at many of these intersections would significantly improve safety and traffic congestion.

#### Reduced air quality associated with freight vehicle emissions and potential health impacts.

Diesel powered freight vehicles are recognised as being major contributors to vehicle emissions particularly particulates, carbon monoxide and sulphur dioxide. These contaminants have the potential to create health impacts in the community, particularly respiratory related illness, and are a major cause of haze.

The poor air quality is exacerbated by the meteorological and topographical characteristics of the Region caused by the inversion layer and effects of the Darling Scarp, whereby pollution dispersion is constrained resulting in periodic exceedences of air quality standards.

The freight industry is the major source of diesel emissions in metropolitan areas and it is appropriate that a targeted strategy is developed to offset the impacts being caused by freight movements. The strategy would need to be linked to a funding arrangement (e.g. freight levy or more equitable distribution of fuel excise levy as previously mentioned) to ensure that there was sufficient and ongoing funding to support strategy implementation.

Another key factor associated with fossil fuel usage is the contribution of diesel emissions to the greenhouse effect. The pricing for freight transport needs to factor in the required carbon offsets to achieve a balanced carbon budget. There are a range of programs available to offset carbon emissions, such as Greenfleet and the Carbon Neutral program, which may be suitable for offsetting vehicle emissions associated with Freight transport.

The Inquiry should determine how freight pricing can include the costs for offsetting carbon emissions and contributions toward health impacts associated with freight related emissions.

#### Increased noise and amenity impacts resulting from freight vehicle movements.

Noise has the potential to adversely impact on the amenity of the local community. Many of the traffic related complaints received by Local Government refer to noise associated with freight movements. This is particularly relevant to built up areas close to highways and areas involving steep inclines where engine brakes are commonly used.

There are a range of noise attenuation measures that are increasingly being applied to major road and highway construction projects, however there is limited funding spend on existing areas where freight related noise are causing adverse impacts on the local community.

The Inquiry should determine how freight pricing can include the costs of ameliorating freight related noise impacts in affected communities and measures to improve amenity associated with freight movements. It is considered appropriate that a study be undertaken in Perth's Eastern Region to identify key noise and amenity impact sites associated with freight movements (see below for further information).

### **Abatement measures for noise and traffic congestion to protect of residential amenity**

There are a range of noise attenuation measures that are capable of minimising the noise impacts related to freight transport that will improve the residential amenity in the region. These include walls, barriers, alternative transport routes, improvements in freight vehicle engine and braking design and a host of other measures. Noise assessments and abatement measures are considered in new construction works for major roads and highways, however this does not address the noise impacts from freight in existing areas, many of which were not designed for the current and future volumes of freight traffic.

It is considered that noise attenuation is an area that requires a strategy to target noise "hotspots" caused by freight transport in the region and a funding program should be developed to implement the strategy. The member Councils in the region should be consulted during the development of this strategy to ensure that local knowledge is included.

In terms of traffic congestion and as previously stated, the freight movements contribute to traffic congestion in a number of major intersections in the region. The main abatement measure to overcome congestion at these intersections requires the construction of grade separated interchanges. This form of transport infrastructure incurs a high capital costs that needs to be factored into future Federal and State Government road funding programs. The RITS study should assist in identifying priorities for grade separated interchanges in the region, taking into account current and future freight traffic.

### **CONCLUSION**

A range of key issues have been raised in this submission for consideration into the Inquiry such as the methodology for road and rail infrastructure, major externalities associated with Road and Rail freight infrastructure impacting on the Eastern Region and abatement measures for noise and traffic congestion.

It is clear from the submission that Perth's Eastern Region and the EMRC member Councils are key stakeholders in Western Australia's freight infrastructure and transport. Although this relationship is primarily geographic, it is considered that the Region and the member Councils require significantly more financial and resource support from the State Government and Federal Government to meet the increased costs (direct and externalities) associated with this infrastructure.