

Submission to Roe Highway Extension PER

Office of Senator Scott Ludlam

OVERVIEW

This submission is in three parts and will discuss in turn:

1. **Its environmental impacts** which have already been found to be unacceptable to the community, to the EPA previously, and as I will demonstrate, according to the EPA's own *Environmental Guidance for Planning and Development – Guidance Statement No. 33. (2008)*
2. **The project rationale and justification (Chapter 2 of the PER)** which are easily discredited.
3. **A number of false claims and anomalies or omissions in the PER.**

SECTION 1 – ENVIRONMENTAL IMPACTS

The project will require a total clearing (biological) footprint of 112 hectares, including:

- Clearing 79 hectares of native vegetation
- Clearing 112 hectares of native fauna habitat
- Loss of 38ha intact native flora and vegetation
- Loss of 7ha of groundwater dependent ecosystem sub communities
- Loss of 15 sub populations of Priority Flora consisting of about 7000 individual plants
- Clearing a Bush Forever site (7ha)
- Clearing 66ha of critically endangered Banksia and Xanthorrhoea woodlands
- Destroying 249 significant trees containing 20 hollows
- Total clearing of up to 5.80ha of Conservation Category wetlands
- Clearing of up to 0.95ha of Environmental Protection Policy Lakes
- Cutting 1 ha out of Bibra Lake (a Conservation Category Wetland)
- Cutting 6ha out of Roe Swamp (a Conservation Category Wetland)
- Clearing and disturbance of up to an additional 15ha of land outside the current project footprint to facilitate construction

In terms of Aboriginal Heritage, there is no doubt the changes proposed to the biophysical environment will adversely affect historical and cultural associations with the area. These changes include:

- Loss of 73ha of Forest Red-tailed Black Cocatoo foraging habitat
- Loss of up to 41 individual *Nuytsia* ('Christmas') trees
- Residual impact on mythological values associated with hydrology

Habitat for three endangered commonwealth listed species will be destroyed:

- Loss of 78ha of foraging habitat for the Carnaby's Cockatoo
- Loss of 73ha of Forest Red-Tailed Cockatoo habitat
- Loss of 5.6ha of confirmed Graceful Sun Moth habitat – representing 64% of its confirmed habitat in the park.

Clearing of more than 1ha of foraging habitat is considered by SEWPAC to be the 'significant impact threshold value' for black cockatoos.

The offsets proposed in the PER are insulting and inadequate:

- A ratio of 6:1 black cockatoo foraging habitat (or the purchase of 468ha) is proposed
- A ratio of 10:1 nesting habitat
- Funding for Graceful sun moths (what, buy them all a fucking car?)
- \$100,000 is offered towards restoring Horse Paddock Swamp
- Revegetation of 52ha of fauna habitat (including revegetating 14ha of currently degraded land) may replace some of the lost habitat, but all EPA guidelines recommend preservation of biodiversity in situ.

Federal Minister Tony Burke in a recent National Press Club address described offsets as a form of "dark arts" and this proposal only confirms this. Offsets do nothing for the species that will be destroyed by this unnecessary project and in no way should be used to justify it.

An endless list of state-listed threatened species will also be impacted:

- The Southern Brown Bandicoot will lose 73ha of habitat
- The Perth Lined Lerista (a striped skink) will lose 91ha of habitat
- The Black striped Snake will lose 43ha of potential habitat
- Habitat will be lost for six conservation significant invertebrates
- Habitat will be lost for ten regionally significant bird species defined in Bush Forever and recorded within the study area are at risk: These include the Splendid Fairy wren, White browed Scrubwren, Western Hornbill, and the Grey Shrikethrush.
- The common brushtail possum, the south western Crevice Skink, Western Bearded Dragon, West Coast Ctenotus, and other fossorial reptiles are also at risk.
- Vegetation clearing will result in the removal of habitat from the only known location of a single species of unidentified millipede which may be of conservation significance

Of six ecological linkages in the project area, three will be affected and fragmented.

We are also signatory to international agreements with Japan, Korea and China to protect migratory birds in danger of extinction. These countries agreed that co-operation was essential and Agreements were signed to commit the countries to take special measures to protect a list of identified species of birds and their habitat.

The proposed project affects seven migratory bird species that fly from distant shores to rest and breed here. These include

- the White Bellied Sea Eagle (from China)
- the Glossy Ibis (from China),

- the Rainbow Bee eater (from Japan),
- the Eastern Osprey (from offshore islands including Indonesia, Philippines, and New Guinea),
- the Eastern Great Egret (from Japan and China), and
- the Cattle Egret (from Japan and China).

These impacts are simply unacceptable.

The EPA's objectives are to protect the environment and to prevent, control and abate pollution and environmental harm.

The EPA *Environmental Guidance for Planning and Development – Guidance Statement No. 33. (May 2008*¹ at ('Guidance Statement') provides an overview of environmental protection policies in place to guide proponents going through the process of environmental impact assessment (EIA) of planning proposals (p2).

Using the EPA Environmental Guidance for Planning and Development – Guidance Statement No. 33. 2008 against these impacts it is clear that the project cannot be supported.

CRITICAL ENVIRONMENTAL ASSETS

Critical environmental assets are the most important environmental assets in the State. The term 'critical environmental assets' was introduced by the EPA in EPA Position Statement No. 9 (EPA2006a).

For the purposes of the environmental impact assessment process, the EPA's list of critical assets includes the following categories:

- **Public conservation reserve system** Nature reserves, Regional parks, etc.
- **Native vegetation** Schedule 5 EP Act states 'Native vegetation should not be cleared if (a) it comprises a high level of biological diversity (b) it is necessary for the maintenance of a significant habitat for fauna indigenous to Western Australia (c) it includes, or is necessary for the continued existence of rare flora (d) it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community (e) it is significant as a remnant of native vegetation in an area that has been extensively cleared (f) it is growing in, or in association with, an environment associated with a watercourse or wetland (g) the clearing of the vegetation is likely to cause appreciable land degradation (h) the clearing of the vegetation is likely to have an impact of the environmental values of any adjacent or nearby conservation area (i) the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water (j) the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.'
- **Ecological communities** maintained above 30% of the pre-clearing extent of each ecological community in a bioregion or in constrained areas on the Swan Coastal Plain maintained above 10% of the pre-clearing extent of the ecological community (Government of Western Australia 2000b, EPA 2003a, or as accepted by the EPA) and Bush Forever sites.
- **Biodiversity** Declared Rare Flora pursuant to the Wildlife Conservation Act 1950, Declared Threatened Fauna pursuant to the Wildlife Conservation Act 1950, Threatened Ecological

¹ http://www.epa.wa.gov.au/epadoclib/2717_GS33.pdf

Communities in the following categories: presumed totally destroyed; critically endangered; endangered; vulnerable; data deficient pursuant to the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, and Species subject to the China–Australia Migratory Bird Agreement and the Japan–Australia Migratory Bird Agreement);

- **Wetlands** Ramsar wetlands, wetlands listed in A Directory of Important Wetlands in Australia, Wetlands protected by environmental protection policies, and Conservation category wetlands as identified by DEC in the Geomorphic Wetlands Swan Coastal Plain dataset); and
- **Heritage** Natural areas of state, national or world heritage significance as identified by the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, Heritage of Western Australia Act 1990 and as accepted by the EPA, Natural areas of indigenous heritage importance having regard for the Aboriginal Heritage Act 1972 and as accepted by the EPA).

According to the Guidance Statement the EPA seeks full protection of these assets.

Conclusion:

Every single category listed above is represented in the project area. That is, the Beelihar Wetlands constitute a Critical Asset according to the Guidance Statement and deserve the full protection of the EPA. The project cannot be approved based as outlined in Guidance Statement Section A2.3 Critical Environmental Assets.

The Guidance Statement also states:

In the first instance, during the formulation of a scheme or proposal, the EPA expects that every attempt will be made to avoid adverse environmental impacts on critical assets. Where special circumstances exist for significant impacts on critical environmental assets, the EPA recommends that government approval is conditional on:

- **full consideration of alternatives**
- **a high level of justification and technical information**
- **impact mitigation** and management, having regard for the EPA’s latest position (EPA 2004c).

In general, there is a presumption against recommending approval for proposals that are likely to have significant adverse impacts on ‘Critical Assets’.

Conclusion:

The project cannot be approved based on Section A2.3 Critical Environmental Assets. The project has significant adverse impacts on Critical Assets. The PER does not provide a full consideration of alternatives. It does not have a high level of justification. The impact mitigation is outweighed by the significant amount of clearing and loss of habitat involved.

AREAS OF HIGH CONSERVATION SIGNIFICANCE

In addition to critical environmental assets, there are other environmental assets that require a high level of protection. These are **high value assets** and are identified under the heading areas of high conservation significance.

Defined as those environmental assets that are in good to excellent condition, are considered valuable by the community and/or government, but are not identified as critical environmental assets. The concept is described in EPA (2004c).

The EPA is unlikely to recommend the approval of projects that have significant adverse impacts on these natural areas.

Areas of high conservation significance (“and are a priority for protection”) in the Perth Metropolitan Region - Swan Coastal Plain portion identified in the Guidance Statement (Attachment B2-3) are:

- Bush Forever sites
- Portions of vegetation complexes where less than 10% of the complex remains in the Bush Forever study area (for example, most complexes of the eastern side of the Swan Coastal Plain), and some vegetation in those complexes where the regional reserves system will not protect 10% of the original area of the complex (for example, the Karrakatta Complex—Central and South).
- Conservation category wetlands and their buffers; and
- Areas that form part of an ecologically significant linkage between conservation areas with Declared Rare and Priority Flora, habitat that supports threatened fauna, threatened ecological communities as listed by the Department of Conservation and Land Management, or native vegetation, flora or fauna that is for any other reason of exceptional environmental value having regard for the advice of relevant government agencies and experts.

Each of these areas categories are represented in the project area.

Conclusion:

The project cannot be approved based on Areas of High Conservation Significance as outlined in Guidance Statement Section B1.2.1 and Attachment B2-3.

FURTHER CONSIDERATIONS ON NATIVE VEGETATION, BIODIVERSITY, FAUNA, AND MIGRATORY BIRD AGREEMENTS

The Guidance statement provides important considerations relating to Native Vegetation, Biodiversity, Fauna, and on our JAMBA and CAMBA agreements. Each will be briefly detailed in relation to the inappropriateness of the project.

Significance of Native Vegetation, Flora and Fauna

The vegetation and flora of Western Australia provides a rich source of biodiversity by world standards.

Native vegetation has a critical role in maintaining the ecological processes that support the right conditions for life, and preventing land and water degradation. However, Western Australia in common with other Australian states has experienced a long-term decline in the extent and quality of native vegetation.

Of Western Australia's 819 vegetation associations, a total of 119 have been reduced below 30% of their pre-European extent, and of these 48 are reduced to 10% or less, and two are presumed extinct (Shepherd et al. 2002).

The Swan Coastal Plain is under significant stress.

The initial impacts of clearing or disturbance are compounded by the creation of non-contiguous bushland remnants and the deterioration in quality of remaining native vegetation through edge effects.

Many problems caused by clearing have proven to be intractable.

Some species can only be propagated or re-introduced at great expense and with prolonged effort.

Once soils, water regimes and microclimates are disturbed, it is virtually impossible to reproduce natural ecological communities and the ecosystem services provided by native vegetation and flora, within the means of most management systems.

The EPA's objective for flora is to maintain the abundance, diversity, geographic distribution and productivity of flora at the species and ecosystem levels through the avoidance or management of adverse impacts and through improvement in knowledge (EPA2004e).

The EPA has established the following broad principles for the protection of native terrestrial vegetation and flora:

- Avoid clearing
- Maintain biodiversity at sustainable levels (retaining each ecological community at an overall level of at least 30% of the original extent of the ecological community in each region. Where less than 30% of an ecological community persists in a region, the EPA expects that every effort will be made to protect all the remaining community, EPA 2000a)
- Prepare and implement regional strategies for native vegetation and biodiversity protection
- Conserve biodiversity in situ
- Reintroduce native vegetation (initiatives to reintroduce and recover native vegetation using local provenance are strongly encouraged, especially in regions where native vegetation is poorly retained or species or communities are threatened.
- Prevent loss of biodiversity. **(No known species of indigenous plant or animal, or community of indigenous plants or animals should be placed in long-term jeopardy or cease to exist as a result of any project)** An ecological community that is at 10% or less of the original extent in a region is considered to be critically endangered.
- Make informed decisions. (For proposed development sites that contain native vegetation, adequate survey work and assessment addressing vegetation and flora characteristics, values, issues, threats, functions, significance, overarching environmental objectives and appropriate management are central to developing sustainable outcomes.)

- Apply new understanding
- Mitigate adverse impacts in exceptional circumstances.

In terms of native fauna, the State of the Environment Report (Government of Western Australia 1998a) states that maintaining biodiversity is an issue of the highest priority for government and community action in Western Australia. Native fauna are an integral part of the State's rich biodiversity and they play an essential role in maintaining the balance in ecosystems. They are also valued by the community for cultural, heritage, economic, recreational, educational, and scientific reasons.

Western Australia has a rich fauna but it is not as well studied as the flora. The vertebrate groups are the best documented with an estimated 3,237 species (FaunaBase on www.museum.wa.gov.au). However, in some groups (especially fishes, frogs and reptiles) entirely new species are described almost every year (EPA 2004f citing Aplin et al. 2001).

The EPA's objective for native fauna is to maintain the abundance, diversity, geographic distribution and productivity of native fauna at the species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge (EPA2004f).

The broad principles of the Environmental Protection Authority (EPA) relevant to land use planning and the protection and management of native terrestrial fauna include the following:

- All native habitats which significant fauna rely on for their survival should be protected
- Protect and manage adequate natural areas
- Native fauna is best conserved in-situ and by keeping each ecological community above the threshold level at which species loss appears to accelerate exponentially, this means retaining most ecological communities above 30% of their pre-clearing level in a region
- The areas of highest conservation significance for native fauna that should be fully protected are identified as areas which specially protected and priority fauna rely, areas used by migratory species protected by international agreements, habitat specialists with limited distribution in the region, wide-ranging species with declining populations in the region or declining distributions, and undescribed species
- The protection of fauna is best achieved by retaining some large, relatively intact bushland areas with a variety of habitat types (B3.2.2, p105)

The management of impacts and offsets proposed in the PER violate each of these broad principles for flora.

Conclusion:

The PER contains one undescribed species of millipede, and to date it is not clear whether more information has been found on this species.

The project cannot be approved based on the EPAs broad principles for the protection of native terrestrial vegetation and flora.

Significance of Biodiversity Conservation

This section outlines the significance of biodiversity, and the broad principles of the EPA for biodiversity conservation.

Protection of biodiversity is given the highest environmental priority rating in the Western Australian State of the Environment report (Government of Western Australia 1998a). The report found that the Swan Coastal Plain is one of six areas in WA experiencing the greatest pressure.

The protection of Western Australia's biodiversity is one of the EPA's priority areas of concern.

Although it was recognised in the 1996 national State of the Environment Report that 'the loss of biodiversity is perhaps our most serious environmental problem' (Department of the Environment, Sport and Territories 1996), the 2001 update found that 'many key threats to biodiversity identified in 1996 still persist' (Environment Australia 2001a). One of the greatest threats to biodiversity is now the clearing of native vegetation.

The Guidance statement confirms the national target is to have clearing controls in place to prevent the removal of ecological communities with an extent below 30% of that present before 1750.

A level of 30% of the preclearing extent of an ecological community is considered to be the threshold level below which species loss appears to accelerate exponentially at the ecosystem level. To achieve the national target, the emphasis is on maintaining natural vegetation in-situ (within and outside conservation reserves) and on replacing losses by rehabilitating degraded areas with local native species.

Given our State's significant biodiversity, the decline in the distribution and abundance of many species in Western Australia and the total loss of some species since European settlement are of grave concern.

About 25 plant species are presumed extinct and 321 are threatened. Among the 149 known species of terrestrial mammals, 10 species are extinct and 31 are threatened (Government of Western Australia 1998a). In addition, 66 ecological communities have been identified as threatened and three are presumed extinct (Department of Conservation and Land Management 2004).

The EPA's broad principles for maintaining biodiversity are summarised below.

- **Maintain biodiversity at sustainable levels.** The EPA considers it is important that ecological communities are maintained above the threshold level of 30% of the original pre-clearing extent of each community. This is a minimum level and should be higher for many ecological communities, for example, rare and geographically confined communities. Ecological communities now at levels below 30% of their original extent in regions should be fully retained.
- **Threatened ecological communities and species should be fully protected and regenerated to sustainable levels.**
- **Conserve biodiversity in situ.**
- **Avoid clearing in regions that have been subject to considerable clearing and alteration of native vegetation.** The EPA urges that any new development is located in previously cleared areas.

- **Protect ecological linkages.** Ecological linkages between key habitat areas should be protected and enhanced.
- **Anticipate threats to biodiversity.** Processes and human activities that threaten biodiversity should be carefully anticipated, prevented and managed, including the spread of invasive species and diseases, salinity, pollution, altered surface water regimes and groundwater regimes, altered fire regimes, the escape of genetically modified organisms, soil degradation and the fragmentation of native habitat.
- **Make informed decisions** and apply the precautionary principle applied where knowledge is lacking.
- **Mitigate adverse impacts.** Projects that propose significant impacts on the environment should be required to demonstrate that the mitigation of impacts has been addressed through the application of considerations based on (in order of preference) avoidance, minimisation, rectification, reduction and offsets as set out in EPA Position Statement No. 9 Environmental Offsets (EPA 2006a).
- **Share responsibility. Every person has a role in protecting biodiversity – all levels of government,** resource users, Indigenous peoples and the community in general. The EPA urges that, wherever possible, approval systems, such as the planning system, conscientiously address the protection of biodiversity.

In view of the importance of maintaining biodiversity, the EPA urges that the issue is fully considered as far as possible during all land use planning processes.

Conclusion:

The project cannot be approved because the protection of Western Australia's biodiversity is one of the EPA's priority areas of concern. Protection of biodiversity is given the highest environmental priority rating in the Western Australian State of the Environment report (Government of Western Australia 1998a). The Swan Coastal Plain is one of the most critical areas under pressure in WA, and land clearing is one of the greatest threats to biodiversity. Maintaining biodiversity in situ AND rehabilitating degraded areas in the project area are an urgent priority and should be the goal for the project area instead of its wholesale destruction.

The Main Roads Department has a role to play in the protection of biodiversity and must recognise that all of our remaining road reserves are now some of the only 'green ribbons' of native vegetation remaining along the Swan Coastal Plain.

International Migratory Bird Agreements

To protect species of migratory birds in danger of extinction that migrate between Australia and Japan, and Australia and China, the governments of these countries agreed that co-operation was essential.

Agreements were signed to commit the countries to take special measures to protect a list of identified species of birds and their habitat.

The Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and Their Environment (JAMBA) was signed on 6 February 1974.

The Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and Their Environment (CAMBA) was signed on 20 October 1986.

The proposed project affects seven migratory bird species that fly from distant shores to rest and breed here. These include

- the White Bellied Sea Eagle (from China)
- the Glossy Ibis (from China),
- the Rainbow Bee eater (from Japan),
- the Eastern Osprey (from offshore islands including Indonesia, Philippines, and New Guinea),
- the Eastern Great Egret (from Japan and China), and
- the Cattle Egret (from Japan and China).

Conclusion

The project cannot be approved due to its impact on seven species of migratory birds for which we are signatory to international treaties to protect.

Finally, the PER Fails on the Checklist for Site Planning to Protect Key Native Vegetation and Flora provided in the Guidance Statement (p88).

Areas on which the project abjectly fails include the recommendation to retain natural areas for their contribution to the community's 'sense of place' and experience of wellbeing, and retain areas of scientific, evolutionary or cultural importance, and retain natural areas that regionally and locally have the best quality native vegetation.

Conclusion

The project cannot be supported due to failing the EPAs checklist in these crucial areas.

SECTION 2: PROJECT RATIONALE AND JUSTIFICATION

The rationale and justification for the project is entirely flawed and easy to discredit. The project should be rejected on these grounds alone.

The project was originally planned in 1955 and the road reserve was set aside in 1963. The rationale is built on engineering models and social values that are now outdated by 56 years.

Each of the reasons provided in this section to justify the project are invalidated by examples of more recent reports or government action. The table below summarises an argument against each of the key justifications for the project.

Table 2.1: Summary of actions or reports invalidating key reasons for the project as described in the PER Project Background	
Project background - Reasons for project	Action or report invalidating each reason
Roe Highway was initially designed to connect Fremantle Port via South Fremantle and along Marine Terrace	South Fremantle section of Roe Highway deleted from the MRS in 1991
Roe Highway will link the port via the Fremantle Eastern Bypass (Healy Road to High Street Fremantle)	Fremantle Eastern Bypass deleted in 2004
Studies in the 1990s identified a requirement for the completion of Roe Highway to Fremantle Port a strategic freight route.	<p>Numerous studies and reviews in the 2000s recommended upgrading existing rail and rail freight infrastructure instead.</p> <p>The Metropolitan Freight Network Review (2001-2004) incorporated a high level of community and stakeholder involvement. It ranked the option for the proposed project as low, and instead ranked the option to upgrade Leach highway west of Kwinana Freeway as high. It recommended a Six Point Plan to improve the current freight network:</p> <ol style="list-style-type: none"> 1. Extend Roe Hwy to Kwinana Freeway (stage 7) 2. Increase quantities of freight transported by rail 3. Build container terminal at Kewdale to reduce truck movements 4. Extend Outer Harbour 5. Improve existing roads
The Roe Highway Strategic Review (GHD and Meyrick 2009) found the proposed project is required due to inadequate existing transport infrastructure to support present and future development and to ease congestion.	<p>The Freight Network Review Second Congress (2002) suggested improvements to transport infrastructure including intersection improvements and congestion management solutions along Leach Hwy and South Street would ease traffic congestion in the region.</p> <p>The Local Impacts Committee (LIC) established in 2002 by then Minister for Planning and Infrastructure undertook technical investigation in conjunction with community consultation and made five key recommendations relating to reducing congestion through a broad and comprehensive road congestion management strategy in the south east metro region,</p>

	retrofitting existing road infrastructure, and pursuing further studies on the effects and perceptions of noise and vibration.
Stock Road is now identified as a future urban freeway (2010, Main Roads representative revealed in a community consultation session).	South West Metropolitan Region Transport Strategy (Travers Morgan Pty Ltd 1992) recommended deleting Roe Highway west of Stock Road because building it would go against the philosophy of demand management and the aim of reducing car dependency.
Project announced as election commitment during 2009 state election. Minister for Transport creates South Metro Connect team (Main Roads Department and AECOM consortium) with a budget of \$20m to write its PER	Decision to proceed with project and subsequent PER ignores all past reviews and recommendations for improving existing freight and road infrastructure.

Section 2.2 - Project Justification

The justifications provided for the project are not robust and can be easily discredited. For example the following reasons appear in the executive summary and are discredited, in turn:

Justification: **The project was designed to connect Fremantle Port with the Kewdale, Welshpool and Canning Vale industrial areas (p iv).**

Facts: The project only replicates a tiny section of Leach Highway. Existing rail freight infrastructure already connects Fremantle Port with Kewdale, Welshpool and Canning Vale.

Existing bottlenecks to the Fremantle Inner Harbour will remain and be exacerbated by the project if an increased number of heavy vehicles approach the port from Stock Road.

It is categorically false to say Roe 8 will improve access to the Murdoch Activity Centre. South Street provides efficient access to the MAC and is also the closest access point to Fiona Stanley Hospital for north bound traffic on the Kwinana Freeway. Congestion on South Street is generally limited to areas west (towards Fremantle) of the MAC.

The Murdoch Activity Centre which will employ thousands of people further underscores the need for high quality, efficient public transport service. For the cost of the proposed project a 43km light rail service could be built, linking Murdoch with Fremantle, Cockburn, and Canning Bridge.

Justification: **The project is expected to convey an average of 60,000 vehicles per day by 2031, which would otherwise be using local roads [including 6000 heavy vehicles] (p v).**

Fact: The traffic modelling to 2031 is based on business as usual scenarios where no significant improvements are made to public transport or demand management.

Justification: The project will provide a route designed for only 6000 heavy vehicles a day.

Fact: The project only provides a 5km diversion for heavy vehicles from a small portion of Leach Highway - after which the vehicles will have to return back to local roads to complete their journey.

Justification: Justification for the proposed project has been reviewed in numerous reports, the majority of which conclude that the proposed project is required to ease congestion (p v).

Fact: The “numerous reports” justifying the project have not been provided in the PER. The Minister has also failed to table reports or answers to questions asked in parliament. Here I refer to Question 692 - which simply does not exist, yet the Minister refers to it in two separate occasions as an answer to questions about congestion and traffic modelling.

Justification: The strategic rationale for constructing the proposed project determined that managing the existing network without the proposed project would not adequately satisfy key freight requirements, thereby jeopardising safety, local air amenity and efficiency (p v).

Fact: The so called strategic rationale is nothing more than a self-fulfilling prophecy. Key freight requirements would be better satisfied by (a) increasing rail freight to Fremantle Port, and (b) establishing as planned an intermodal terminal in Kwinana with access from the Rowley Road exit of the Kwinana Freeway.

In terms of local air amenity, since existing bottlenecks to the Fremantle Port will not be solved by the project, local air amenity and efficiency will actually be worsened in local areas. Local air amenity in the residential and environmental areas proximate to the project will significantly be worsened. This constitutes a lose-lose scenario.

2.2.1 Forecast Growth

The PER describes population growth, a growing freight task, and new development, as the three key factors likely to contribute to increasing pressure on Perth’s south-west metropolitan road network (GHD and Merrick, 2009, p18). However none of these justify the project and in fact more balanced analysis of each proves they are reasons against the project. Each will be described in turn.

Population growth

Four key population reasons are provided to justify the project, all can be invalidated by analysis and data, in turn.

Reason 1: Perth’s south east and south west metro areas will grow by 34% by 2031 (p.19)

Fact: It is a common misconception that a growing population is the main reason for growing traffic congestion.

The US Department of Transport did a study in the 1990s that found that there are five primary factors contributing to traffic congestion. Of those five factors, population growth was the least significant factor – contributing just 13% to overall traffic congestion. In the greater Chicago area between 1982 and 1997, its population grew by 900,000 or by 13%. However, congestion was much worse than the increase in population would imply. If everyone in Chicago drove as they did in 1982, traffic levels would have risen by a similar amount - the problem was that motorists in 1997 drove 88% more than they did in 1982.

Over this 15 year period, its population grew by less than 13%, whilst its highways grew by over 50%. This gave motorists the impression that there were not just another 900,000 but 6,220,291 new motorists driving around the Windy City (STPP, 1999, p. 3). In other words, only a small fraction of the traffic congestion experienced in Chicago can be attributed to a rise in population – the rest is down to *driving behaviour* and suburban sprawl.

Australia's population is predicted to grow by 37% between 2005 to 2020, but car numbers are said to increase by 24% whilst trucks and commercial vehicles may jump by 90% (Senate Standing Committee on Rural and Regional Affairs and Transport, 2009, p 18)

With the predicted 2.2 million people expected to live in Perth by 2031, and with Professor Richard Weller, author of *Boomtown 2050* predicting the population of Perth will be 4.2 million by 2056, Perth's current car dependency and inadequate transport network will simply not cope. That is unless there are tremendous changes in land-use patterns and a shift in our travel behaviour. We would need to use alternative forms of transport much more. We also need to build smarter suburbs and better public transport and cycling infrastructure, as well as more walkable town centres and suburbs.

Considering our population, Perth already has an extensive road network. Perth has more metres of road per person than any other Australian capital. Per person, Australia's bitumen to people ratio is more than four times the European average and more than ten times the Asian average. On a per capita basis, Perth has more than twice as much roadway as San Francisco, ten times that of Singapore or thirty times that of Hong Kong. These are all very productive cities with thriving ports. Effective transport systems are not dependent on extensive roadways.

Wealthy Asian and European cities have less road space for each person than Australian or American cities, but have more efficient and reliable transport systems because most trips do not depend on a car. Zurich has one of the best light rail networks in the world, whilst in Amsterdam, 35% of trips are made on foot or by bicycle. (Newman & Kenworthy, 1999, p. 82-83).

It is also vital to note that Perth's population is increasing, but data shows car use is decreasing and public transport is actually increasing.

Recent investments in passenger rail have shown a renewed interest in public transport. Currently, public transport accounts for just 5.5% of trips in Perth and 9.2% during commuter peak periods. However in the last year public transport patronage has increased by 18%, outpacing population growth of 3% (West Australian, 30th September p.6: *Buses, trains back in favour*) The total amount of

passenger travel has doubled in Perth in the past 30 years ago. In 2007-08, there were 18.95 billion passenger kilometres of passenger traffic in Perth.

Perth uses public transport less than all other Australian capitals and travel five times less than the European average. Whilst about 10% of Perth commuters use a train, this figure is about 20% in Canada, just shy of 40% in Europe and about 45% in Asia. (Newman & Kenworthy, 1999, pp. 82-83) Perth's reliance on the least space-efficient form of transport is a recipe for further worsening of our traffic conditions.

Reason 2: Cities of Cockburn, Fremantle and Melville are growing, with rises expected to be:

City of Cockburn 44%;
City of Fremantle 32%;
City of Melville 10%

Fact: The two local government areas with the largest predicted growth (Fremantle and Cockburn) are already well serviced by public transport, and both Mayors completely oppose the project and call for public transport spending instead.

Conversely, the City of Melville will experience significantly lower growth. Its Mayor supports the project.

Reason 3: Significant residential growth is expected in locations adjacent to the Kwinana Freeway (p.19)

Fact: These areas are already identified in Directions 2031 as Transit Oriented Developments (TODS) in future train stations along the Perth to Mandurah Rail line. Residential growth therefore will not significantly increase traffic levels on the road network, particularly in peak periods, as new residents in TODs will use public transport during peak periods, not their cars, to get to and from work.

Reason 4: The growth expected for the region will significantly increase traffic levels on the road network, particularly during peak periods (p.19)

Fact: This is simply not true. Residential growth in the region will in fact increase demand for public transport in peak periods.

Growing freight task

The PER provides two key freight reasons to justify the project. Each can be discredited in turn.

Reason 1: The total quantity of imported freight in Perth will double in the next 20 years which will be reflected in a growth of Perth road freight of between 2-4% per year to 2025 (p19)

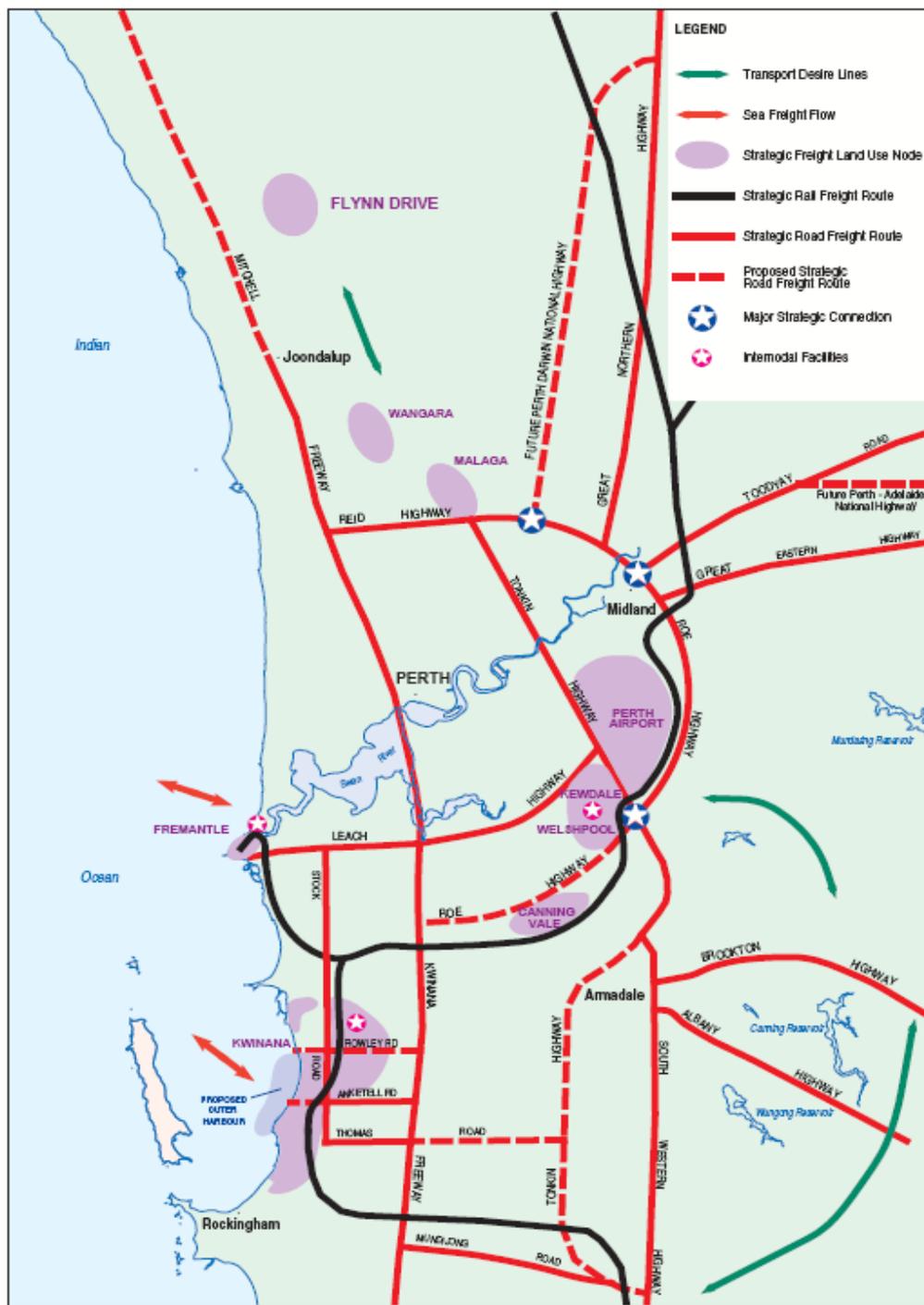
- Fact: Current rail freight targets aim for 30% of port-related traffic to be moved by rail. This will not only take road freight off the road, but the percentage is expected to increase as oil prices inevitably rise.
- Reason 2: Inter and intrastate freight accounts for 80% of road movements made by small to medium sized trucks - and is not port related, instead it travels relatively short distances in the metro areas to highly dispersed origins and destinations. The majority of the metro freight task will remain on the road network. (GHD and Merrick 2009, p20).
- Fact: If 80% of freight made by small to medium trucks is unrelated to the port this strongly invalidates the project - which is ostensibly being built to improve access to the port.

New development

The description of new development in this section of the PER and the accompanying map of current and planned urban growth and industrial centres in the south east (Figure 2.2-1, page 21) is incredibly misleading. It omits both our existing rail freight network infrastructure and our future planned strategic freight network - which already service Perth Airport, Kewdale, Welshpool, Canning Vale, Fremantle Port and the future outer harbour and industrial estate at Kwinana.

If it were included it would clearly be seen that the project simply replicates existing rail freight infrastructure running right along side it. This can clearly be seen below in Figure 13a²

² Source: Department of Transport *Metro Freight Network Strategy* at <http://www.transport.wa.gov.au/freight/19707.asp#1>



Components of the Strategic Freight Network

Figure 13a

This section is also provides misleading reasons to justify the project in two further ways.

Firstly it states that planned urban growth areas include the Murdoch Activity Centre (MAC), Port Coogee and the Western Trade Coast (incorporating Latitude 32 and Henderson industrial areas). However all of these areas are already connected to existing heavy rail and freight rail infrastructure and future light rail and rapid bus transit. The project would make no difference to growth in these areas.

Secondly it says Maddington-Kenwick and South Forrestdale are being explored for future industrial uses. However these areas are already connected to intermodal freight facilities and are ideally located to connect with Latitude 32 (WAPC 2009a, cited p19). The project would make no difference to growth (or efficiency) in these areas as it is too far north to be used for any travel between the sites. Instead travel would occur via Rowley Road - Kwinana Freeway - Roe Highway, or by rail freight.

The three key urban development justifications for the project are therefore not founded.

2.2.2 Planning for Growth

This section is poorly written and contradictory. Nothing in this section justifies the project and if anything the section contradicts it, for example it states:

- Directions 2031 is intended to lead to a **reduction** in the length of individual trips and reliance on motor vehicles (p22) yet this project encourages an increase in both.
- Fremantle Port handled 550,000 twenty foot container equivalent units (TEU) in 2008-09, with only 18% transported by rail. This is predicted to double to 1.2m TEU per year with 33% on rail. The capacity of the rail track is limited but could be improved by constructing a second track, night time running and double stacking containers. "However", the PER states, "this will increase the cost of the rail, which may reduce its economic viability" (p23). If the only impediment to these improvements to getting more freight on rail is the cost then this is a strong reason against the project, which itself costs in excess of \$700 million.
- The proposed project facilitates direct freight movement between Perth Airport, Kewdale-Welshpool and Fremantle Inner Harbour via Stock Road; as well as to Latitude 32, Fremantle Outer Harbour, James Point Port, and industrial areas in Kwinana (p23). This is simply not true - direct freight movements to the Inner harbour still rely on trips along Stock Road and back on to Leach Highway and in to local Fremantle roads that are already at capacity; direct freight movements to the outer harbour will be made using Kwinana Freeway and Rowley Road, further to the south.

The three key growth reasons provided for the project are therefore not justified.

2.2.3 Transport Needs

This section hinges on five key justifications for the project:

- It was identified in the 1955 Stephenson Hepburn Plan
- It provides a new east-west link
- It reduces congestion on existing east-west links
- It supports economic development
- It provides access into the MAC via an extension of Murdoch drive

None are supported by facts, and will be discussed briefly in turn.

Reason 1: Roe Highway was identified as a strategic orbital route around Perth connecting Fremantle Port with the eastern suburb of Midland in the 1955 Stephenson and Hepburn Plan for the Metropolitan Region (p24)

Facts: The Stephenson Hepburn Plan was devised as a plan for the city of Perth that could accommodate 1.4 million people by 2005. Its purpose is now passed and it no longer reflects the transport needs and environmental values that the community hold today.

The same 1955 Plan also proposed wildly inappropriate measures to complete the ring road, such as demolishing most of the iconic West End of Fremantle including the Fremantle Markets and Fremantle Town Hall in order for the freeway to make it from Marine Terrace and disgorge its traffic into the city and port via a multilevel interchange on Philimore Street.

Perth commuters were once served by a vibrant tram network, which was established in the 1890s. The 1920s and 1930s were the heyday of Perth as a “transit city”, with 68 trams carrying in excess of 35 million passengers by 1933. In the wake of the Second World War, the advent of cheap oil and post-war wealth saw the piecemeal abandonment of the tram and trolley-bus network in favour of a new freeway system mandated under the “Stephenson-Hepburn Plan” of 1955 and consolidated as the Metropolitan Region Scheme in 1963. The last tram ran in 1958, and the private automobile has largely ruled the city ever since, with 100 kilometres of low-density, car-dependent coastal sprawl the direct consequence.

Reason 2: It provides a new east-west link

Facts: It is simply not true.

The 5km continuation from the existing freeway to Stock Road is not a “Vital” link and does not provide “a more direct route to various destinations”. (p24). The project will not change the fact that Leach Highway is the primary access route used by industry to access the port.

Reason 3: It reduces congestion on existing east-west links

Facts: No data at all is provided in the PER to support this claim, but there is a wealth of data to demonstrate that building more roads does not solve congestion.

A major argument made for building a new road within a city is to reduce traffic congestion. The reality has been that the more roads are built, the more traffic congestion there is. (Litman 2009). Examples of research that argues against the need to build more roads to improve urban transport includes Carmen Hass-Klau (1999) Engwicht (1992), Goodwin (1997), Litman (2009), Newman & Kenworthy (1999), SACTRA (1994) , STPP (1999) and Samuels (1994). Traffic engineers in the past have argued the need to build new roads to ‘keep up with demand’ as our populations grow³ However, Litman and others critical of this old paradigm argue that traffic is better understood as a gas that expands to fill spaces:

“If road capacity increases, the number of trips also increases until congestion again limits further traffic growth.” (Litman, 2009)

³ An increasing population is thought to increase traffic volumes by the same margin according to present travel behaviour and modal share. However, travel behaviour and the modal transport split are not fixed.

When a new road is first built, traffic congestion may be lessened for a time, allowing for faster and easier travel for vehicles. In fact,

“Road improvements that reduce travel costs attract trips from other routes, times and modes, and encourage longer and more frequent travel.” (Litman, 1999, p. 2)

This increase in traffic volumes on a new or improved road is known as **‘generated traffic’** in the trade. A new road may not only take traffic from other roads, it may also encourage travel that would not have occurred otherwise. This new travel increases the total vehicle kilometres travelled; this is called **‘induced travel’**. New roads do both – attract existing traffic and encourage people to drive more often and for longer distances.

There are many examples of Induced trips and generated traffic here in Perth.

Before the Graham Farmer Freeway was built, 134,792 vehicles were entering the city each weekday from the Causeway and Garrett Road Bridge roadways (1998-99). Five months after the Graham Farmer Freeway was opened in April 2000, an *additional* 31,100 vehicles entered the city on a daily basis from the three eastern crossings. That is an increase in traffic volume of 23%. These figures clearly demonstrate the new Farmer Freeway encouraged more people to drive into the city. There is no reason why Roe 8 will be any different.

Traffic congestion was calculated to cost Perth \$900 million in 2005 and is expected to climb to \$2.1 billion by 2020 if no changes are made. (Council of Australian Governments, 2006, p. 5) Forecasts are based on the expected population growth, new cars on our roads and current car-use behaviour. This prediction shadows the previous growth in vehicles in the preceding 15 years before 2005. **Perth’s transport network cannot function with such increases in transport without significant changes to both our infrastructure and travel demand management policies.** Otherwise, overwhelming traffic volumes will grind the city to a halt.

Traditionally, we have tried to mitigate congestion by building more roads. This is the answer offered by the State Government. The archaic and myopic rationale of the State Government is of infinite population growth accompanied by comparable growth in automobile volumes. Traffic engineers considered traffic demand to be unaffected by road conditions. That is to say that people’s reasons for driving are due solely to their own reasons for travel and are not influenced by transport conditions (such as price or speed). As 80% of trips are made by car, it is believed that this is always the preferred mode of travel, and therefore governments have felt compelled to meet that perceived demand.

What actually causes traffic congestion?

- Increased trip length 35%
- Increased trips taken 18%
- Decrease in vehicle occupancy 17%
- Switch to driving 17%
- Increase in population 13%

In terms of increased trip length, studies have shown low-density housing on the fringes of our cities is perhaps the single greatest cause of congestion. (Newman & Kenworthy, 1999; STPP, 1999)

Our land use pattern (sprawl, low density) is facilitated by an unsustainable transport pattern of People living on Perth's urban fringe have higher rates of car ownership and drive greater distances. Despite investments in public transport, cars have actually increased their share of the total number of trips in the past 20 years. This car-dependence increases in the outer suburbs, where 9 out of 10 trips are by car. This is in large part due to the fact that 70% of new housing is on the urban fringe, where public transport services are poor.

Inner suburbs like Perth, Vincent and Fremantle travel an average of 25-27 km per day, outer suburbs like Joondalup and Armadale travel about 36-37 km per day. (EPA, 2007) In a week, those in the outer suburbs travel, on average, an extra 77 km and throughout the course of a year extra, an additional 3,500 km. Therefore, people living in the outer suburbs generate more traffic than people living in the inner suburbs.

Our land use patterns demonstrate and reinforce automobile dependence. For example:

- In 2004, for every four people, there were three cars.
- Perth residents make about 3.1 trips each weekday and 8 out of 10 trips are by car. (EPA, 2007)
- Of Perth's 755,048 commuters, 629,019 arrived to work in a car in 2006.4 (BITRE, 2009, p. 67)
- Directions 2031 estimates there to be 5.8 million trips made per day around the Perth metropolitan area (which is more than the 3.1 trips estimated by the EPA in 2007). This number is predicted to rise to 7.7 million per day by 2031. (Department of Planning WA, 2009, p. 25)
- Total daily vehicle kilometres travelled in Perth rose by 50% between 1991 and 2004, from 26 million to 37 million. (BITRE, 2009, p. 61)
- Despite the proliferation of freeways, Perth residents are spending more time and money on the road. Perth motorists spend an average of 60-70 minutes behind the wheel each day.

We are also under-investing in rail and other forms of transport our city and state desperately need. For every dollar Australia spends on rail infrastructure, we spend \$4.60 on roads. Australia spent \$2.6 billion on rail in the 2007/2008 financial year but almost \$12 billion on roads. (BITRE, 2009, p. 26)

WA spent \$1.55 billion on roads in 2006/2007 – which is more than South Australia, Tasmania, the NT and the ACT combined. In the decade between 1997 -2007 more than \$12.5 billion has been spent on WA roads and by 2007, WA had 152,262 km of roads – which is more than Victoria (at 149,012 km) (BITRE, 2009, p. 30).

Reason 4: It supports economic development, in the short term it will support the growing number of vehicles using the Fremantle inner harbour. In the long term it will provide the necessary infrastructure for businesses to operate effectively.

Fact: Existing bottlenecks to the Fremantle inner harbour will remain and be exacerbated by the project if an increased number of heavy vehicles approach the port from Stock Road. And in the long term any strategy which ties economic development to rising fuel prices and growing road congestion is a recipe for disaster.

⁴ There were 570,271 behind the wheel and 58,748 who were in the passenger seat. (BITRE, 2009, p. 67)

In broader terms of economic development, low urban population densities increase the travel distances, costs and energy needed for transport per person. Perth residents have more roads per person and travel longer distances than residents in other Australian capitals. By contrast, European and wealthy Asian cities that have higher densities travel shorter distances and rely much less on cars. (Newman & Kenworthy, 1999, pp. 82-83)

In fact, Perth spends more than three times its income on transport as wealthy Asian cities (17% compared with just 5%). (Fleay, 2000, p. 6) In a study of 37 international cities commissioned by the World Bank, Perth devoted the highest percentage of its wealth to transport. The study found the more dependent on the automobile, the higher the proportion of a city's wealth was spent on transport.⁵ (Fleay, 2000) Embedded costs of using vehicles are extensive. To give but one example, Western Australians buy 1.5 million tyres and discard 650,000 to landfill every year. (BITRE, 2009)

Urban Efficiency and Performance Indicators

The Australian Transport Council identifies five performance indicators to assess an urban transport system. According to their criteria, **urban transport systems should be efficient, reliable, productive (for volumes and speed), have high accessibility (for all) and minimise environmental harm** (such as greenhouse gas emissions) (Australian Transport Council, 2009, p. 3). Roe 8 fulfils none of these criteria.

Reason 5: It provides access into the MAC via an extension of Murdoch drive (p24).

The PER states "The Murdoch Activity Centre further underscores the need for the proposed project. At present there is no access to MAC (which includes the Fiona Stanley Hospital) from north bound traffic on the Kwinana Freeway, except via South Street, which is already heavily congested. Connection with the proposed project would improve traffic efficiency, reduce congestion on South Street and provide efficient access to the MAC" (Executive Summary, page v).

Fact: It is categorically false to say Roe 8 will improve access to the Murdoch Activity Centre.

South Street provides efficient access to the MAC and is also the closest access point to Fiona Stanley Hospital for north bound traffic on the Kwinana Freeway. Congestion on South Street is generally limited to areas west (towards Fremantle) of the MAC.

The Murdoch Activity Centre which will employ thousands of people further underscores the need for high quality, efficient public transport service.

For the cost of the proposed project a 43km light rail service could be built instead linking the MAC directly with Fremantle, Cockburn, and Canning Bridge.

The construction of Fiona Stanley Hospital also involved the clearing of significant amounts of native vegetation and habitat for state and federally listed species. This must not be further compounded by a false reason to clear even more at the Beeliar wetlands through this project.

⁵ It was estimated in one study that for every 1,000 km of travel that switched from a car to walking would save AUS\$181 each year. (Ker, 2001)

2.2.4 No build option

The PER claims “Since 1955, justification for the proposed project has been reviewed in numerous reports, the majority of which conclude that the proposed project is required to ease congestion” (p26). Yet these “numerous reports” have simply not been provided in the PER. The Minister has also failed to table reports or answers to questions asked in parliament. Here I refer to Question 692 - which simply does not exist, yet the Minister refers to it in two separate occasions as an answer to questions about congestion and traffic modelling.

The PER also claims “the strategic rationale for constructing the proposed project was confirmed and documented by Main Roads in 2001, and this study determined that managing the existing network without the proposed project would not adequately satisfy key freight requirements, thereby jeopardising safety, local air amenity and efficiency” (p26).

In fact the so called strategic rationale is nothing more than a self-fulfilling prophecy by a Main Roads department that is not integrated with other areas of transport such as freight, or other land use and planning agencies. Key freight requirements would be better satisfied by (a) increasing rail freight to Fremantle Port, and (b) establishing as planned an intermodal terminal in Kwinana with access from the Rowley Road exit of the Kwinana Freeway.

In terms of local air amenity, since existing bottlenecks to the Fremantle Port will not be solved by the project, local air amenity and efficiency will actually be worsened in local areas. Local air amenity in the residential and environmental areas proximate to the project will significantly be worsened. This constitutes a lose-lose scenario.

The key justification for the project however has always been that it will reduce traffic, including heavy traffic, on the surrounding road network. **However this section clearly shows the project makes no significant difference to traffic volumes to 2021.**

Daily traffic flows and heavy vehicle flows on the surrounding road network

Total Traffic

Figure 2.2.6 (page 28) illustrates the impact on Leach Highway, South Street, Farrington Road and North Lake roads with and without the project going ahead to 2021.

This section clearly shows the project makes no significant difference in daily traffic flows and virtually no reduction in daily heavy vehicles on any of these roads by 2021. For example forecast daily total traffic flows:

- On Leach Highway will be virtually unchanged in 2021 whether Roe 8 is built or not with a reduction from 57,000 without the project to 56,500 with the project
- On South Street will rise from about 33,000 to 44,000 without the project
- On Farrington Road increase only slightly on 2006 levels without the project from about 15,000 to 16,000
- North Lake Road will be virtually unchanged in 2021 if the project goes ahead, rising from 28,000 in 2006 to 32,000 with the project or 35,000 without.

These absolutely tiny reductions do not justify the project. These figures alone should provide reason enough for the EPA to find the justification completely unfounded.

Heavy Vehicles

The PER states the project will provide a route designed for the safe and efficient movement of only 6000 heavy vehicles a day. It is unclear where these numbers come from, and what is clear is the amount of trucks being taken off Leach Highway is absolutely minimal. The differences in forecasted heavy traffic with and without the project to 2021 are:

- Leach Highway - a reduction from 2900 to 2600 with the project
- South street - a reduction from 2600 to 1450
- Farrington Road - a reduction from 700 to 400
- North Lake Road - a reduction from 1400 to 1300

The key rationale for the project appears to be unfounded: It will not reduce heavy traffic on Leach Highway significantly. The project is therefore not justified.

The claim on page 28 that the project is expected to convey an average of 60,000 vehicles per day by 2031, which would otherwise be using local roads [including 6000 heavy vehicles], does not appear to be supported by the data previously described, which clearly shows the daily traffic flows will not be significantly different if the project goes ahead.

Forecast changes to Level of Service (congestion) along roads and at intersections

The forecast traffic growth on major roads are shown in Figure 2.2-4 (midway between two intersections) and Figure 2.2-5 (PM peak hour intersection congestion) to 2021 without the project. The graphs demonstrate that traffic is expected to grow to 2021 but not significantly: Only 7 of 11 'midway' points between two intersections are expected to worsen, (and not nine as the PER states) and only by one level at that. Three of 11 points will not change.

Of 17 intersections at PM peak hours, 9 are expected to worsen (mostly by one level) but 7 of 17 will not change.

These forecasts do not justify the project.

Further, the forecasts are unreliable because they do not include demand management modelling (such as a congestion strategy including investment in rail freight infrastructure, public transport, and behaviour change). They also appear to be based on imaginary scenarios where fuel prices do not rise dramatically by 2031.

This section provides strong arguments against the project rather than a justification for it.

To summarise, without the Roe Highway extension by 2021 —

- Only nine of the 17 intersections measured are predicted to be more congested; but in seven of these nine intersections the predicted levels of increase would hardly be noticeable because they are already significantly congested; and,
- In seven intersections there is no increase in congestion.

Figure 2.2-7 (page 29) illustrates the forecast levels of service in the surrounding network. Again it clearly shows zero or marginal change to 2021 if the project goes ahead.

Specifically:

- On Leach Highway there will be zero change in level of service with the project
- On South Street there will be a marginal change, with some intersections worse but some marginally better
- On Winterfold Road to Farrington Road there is zero change
- On Phoenix Road to North Lake road there is slight improvement north of the project but a worsening south of the project.

Further, parliamentary questions from Lynn MacLaren MLC have confirmed that:

- Congestion on South Street and North Lake Road is likely to be a problem only in peak hours
- The congestion on South Street and North Lake Road is unlikely to be improved from that currently experienced if Roe 8 is built
- In some cases congestion will be worse, especially at all intersections on Stock Road and Murdoch Drive
- All intersections on Stock Road will worsen and have increased congestion when Roe Highway is extended. Therefore it is planned that Stock Road will be upgraded to a six-lane fully grade-separated highway to address this congestion. (Legislative Council Question without notice 676 and 691)

Conclusively, total traffic flows will only be marginally lower with the Roe Highway extension, and there will be no significant change to congestion at most intersections -in fact congestion will worsen in half of the areas surveyed. This section proves conclusively the project not justified.

Forecast deterioration of Stock Road

Stock Road will be upgraded to a freeway if this project goes ahead.

The PER acknowledges the forecasted deterioration of Level of Service on Stock Road - which "is explained by the diversion of traffic to Stock Road via the proposed project. Stock Road is planned to be upgraded to a freeway to carry these high volumes of traffic, including high volumes of freight" (p28). This only proves that building more roads to solve congestion only creates problems elsewhere, and worse, creates a domino effect of road widening and conversion to freeways. This is like saying obesity can be solved by eating more fat. It is a dangerous and outdated approach to traffic management and for this reason alone this project must not be approved.

It is also worth adding:

- The project only provides a 5km diversion for heavy vehicles from a small portion of Leach Highway - after which the vehicles will have to return back to local roads to complete their journey.
- For heavy vehicles travelling to Fremantle Port this will mean exiting via Stock Road and travelling along Stirling Highway, Port Beach Road, and Tydeman Roads, and will simply add to existing bottlenecks in these areas.
- For heavy vehicles travelling to future new ports south of Fremantle the project is completely redundant. To access the future Outer Harbour in Cockburn Sound heavy vehicles will simply continue on Kwinana Freeway and exit on to Rowley Road - which is being upgraded for this purpose. It is well known that the future intermodal terminal planned for Hope Valley near Kwinana will mean Rowley Road - not Roe 8 - will become the main east-west truck route.
- In terms of “safe and efficient movement”, heavy vehicles will comprise 10% of the traffic on Roe Highway, meaning smaller passenger vehicles will be forced to compete for space with large, dangerous freight vehicles travelling at 100km along an urban freeway.

This section is wildly deceptive. Traffic modelling to 2021 should have included fuel price and demand management scenarios, which it does not.

It also should have investigated the effect of adopting the Freight Network Review’s 6-Point Plan - which includes increasing the modal split of freight on trains up to 30%. This in itself would reduce freight traffic on Leach Highway considerably more than the project.

2.2.5 Alternatives considered

This section fails to consider true alternatives such as demand management and congestion strategies including improved public transport, rail freight, and better land use planning. Traffic congestion cannot be solved by building new roads or widening existing ones. Whilst freight is a major road-user, it makes up just 9% of the traffic volume.

Making passenger transport more efficient will have the greatest effect on traffic congestion. If the State Government chose to spend \$700 million on traffic congestion strategies, much could be achieved. Directions 2031 mandates more sustainable urban design – emphasising urban infill and people living and working in close proximity to efficient public transport. Improve our urban freight network. In 2009 Sydney’s freight network got a boost with the approval of \$309 million funding from Infrastructure Australia for the Southern Sydney Freight line and a further \$27 million to upgrade the Botany rail line. (Infrastructure Australia, 2009, p. 17) Conversely, Western Australia made no application for rail funding.

SECTION 3: FALSE CLAIMS AND ANOMALIES IN THE PER

There are several serious claims that are simply not truthful in the PER.

These are:

Claim: This PER represents a preferred option. The PER states “A preferred option, which achieves the best environmental and social outcomes, has been determined in collaboration with the community, stakeholders, and environmental practitioners.” (*Invitation to make a submission page*)

Fact: The preferred option for the best environmental and social outcomes is a no build option. The consultation for this project never included a ‘no extension’ option. For this reason a number of key community stakeholders were excluded from the consultation and in turn a very low number of participants contributed to the design options in the PER. The PER therefore does not represent the preferred option.

Claim: The preferred design was selected following an extensive options analysis and consultative process. During this process project objectives; as well as specific environmental, social and economic criteria were examined. (Executive summary p i)

Fact: Environmental, social and economic criteria were simply not examined in community information sessions or during design workshops. The only information provided at such workshops were posters and a promotional video which featured motherhood statements on sustainability. There were no expert presentations on Aboriginal heritage values, matters of national environmental significance, threatened ecological communities or threatened species. Main Roads representatives at community information sessions were inappropriately and aggressively supportive of the extension - and dismissive of community concerns for the preservation of the wetlands. The economic values of the wetlands were never included in the PER, despite a request from stakeholders during consultation on the Terms of Reference for the PER.

The PER also contains a number of omissions and errors.

Omissions include:

- The EPA has previously found the Roe 8 extension to be unacceptable to approve on environmental grounds
- The cumulative impacts on clearing of this scale
- The number of regional parks of similar size and quality in the south metro region so as to compare the regional impact of losing a significant amount of native vegetation and wetlands
- The location of offsets to be purchased, whether these are actually available, and whether the proponent would purchase these before any work whatsoever begins
- The failure of other similar offset programs and translocation projects in WA
- This project does not constitute a net environmental benefit
- Any analysis of the highly political nature of this project. The state government made a commitment to the project in the last state election, and only enjoys support for the project from Liberal held state and federal elected members. The project is highly political and the state opposition recently promised to delete the project from the MRS if elected. The election commitment therefore is the only rationale behind this project - and such an expensive and environmentally destructive project with zero transport benefit should not go ahead without bipartisan support.

- Any analysis of the economic viability or impact of this project on the state's budget, or comparison with the current operating budget of the Main Roads Department. Main Roads simply cannot afford this project alone, and the federal government has already confirmed it will not be providing funding for the project.

Errors include:

- The claim that only five percent of the area covered by groundwater dependent ecosystem (GDE) sub communities within the GDE study area will be cleared. **This is in fact a miscalculation. In fact the figure is 16%.** That is three times the impact reported in the PER⁶.
- The claim that the maintenance of the water cycle is essential to the continued long-term function of Roe Swamp. This will be achieved by the provision of a bridge that spans a significant extent of very good condition vegetation within Roe Swamp. (pvii). However the impact of reduced rainfall on the vegetation covered by the bridge (essentially a large roof over the vegetation) is not explored.

CONCLUSION

The spirited and vehement opposition to this project by the local community, its unacceptable environmental and heritage impacts, and the lack of a valid rationale or justification mean this project simply cannot be approved by the EPA.

⁶ The PER states: Of a total of 79ha of native vegetation to be cleared, 13ha of groundwater dependent ecosystem (GDE) sub communities will be cleared for the proposed project. This represents approximated five percent of the area covered by GDE sub communities within the GDE study area. Executive Summary, Page vii.

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Appendix

ROE HIGHWAY EXTENSION — TRAFFIC MODELLING

1 September 2011 by **Hon Lynn Maclaren**

691. Hon LYNN MacLAREN to the minister representing the Minister for Transport:

(1) Can the minister confirm information published in the “Roe Highway Extension Public Environmental Review Volume 1”, which states that —

(a) forecast daily total traffic flows, as shown in figure 2.2–6 on page 28, on Leach Highway would be virtually unchanged in 2021 whether Roe 8 is built;

(b) congestion on South Street and North Lake Road is likely to be a problem only in peak hour; and

(c) the congestion on South Street and North Lake Road in 2021 is unlikely to be improved from that currently experienced if Roe 8 is built and in some cases will be worse, especially at Stock Road and Murdoch Drive?

(2) What other strategies were investigated to reduce traffic congestion at peak times?

Hon SIMON O’BRIEN replied:

I thank the honourable member for some notice of this question.

(1) (a) Modelling predicts that traffic flows will be slightly lower with the Roe Highway extension. Truck traffic flows will reduce by 15 to 20 per cent, thereby providing improved social amenity for residents.

(b)–(c) Please refer to question without notice 962.

(2) Please refer to question without notice 962.

Question Without Notice No. 676 asked in the **Legislative Council** on **31 August 2011** by **Hon Lynn Maclaren**

Parliament: **38** Session: **1**

ROE HIGHWAY EXTENSION — TRAFFIC MODELLING

676. Hon LYNN MacLAREN to the minister representing the Minister for Transport:

I refer to traffic modelling for the Roe Highway extension.

(1) What are the predicted total daily traffic flows on Leach Highway with and without the proposed Roe Highway extension in 2021 and 2031?

(2) Does the modelling predict that the Roe Highway extension is unlikely to markedly decrease the amount of traffic on Leach Highway?

(3) How is the expenditure of approximately \$700 million justified, given that without the Roe Highway extension by 2031 —

(a) only nine of the 17 intersections measured are predicted to be more congested;

(b) in seven of these nine intersections the predicted levels of increase would hardly be noticeable because they are already significantly congested; and,

(c) in seven intersections there is no increase in congestion?

(4) At which intersections does modelling forecast congestion will worsen, causing forced traffic flow if the proposed highway extension is completed?

Hon SIMON O'BRIEN replied:

I thank the honourable member for some notice of this question.

(1) Please refer to question on notice 962.

(2) Traffic modelling indicates up to a 10 per cent decrease, with a 15 to 20 per cent reduction in the number of trucks.

(3) Roe Highway extension will provide a high standard east–west link with forecast traffic flows of up to 75 000 vehicles per day in 2031. Those vehicles would otherwise have used the existing road network. The extension will provide increased road safety and transport cost savings of over \$4 billion between 2016 and 2031. If Roe Highway is not extended, traffic will divert onto local roads as many major intersections are already operating at full capacity.

(4) Congestion at most of the existing intersections of local roads in the region will decrease. Intersections on Stock Road, in particular those south of Roe Highway, will have increased congestion when Roe Highway is extended. Stock Road is ultimately planned to be upgraded to a six-lane fully grade-separated highway to address this congestion.