

**SUBMISSION TO FEDERAL DEPARTMENT OF INFRASTRUCTURE, TRANSPORT,
REGIONAL DEVELOPMENT AND LOCAL GOVERNMENT IN RESPONSE TO THE
'ADELAIDE RAIL FREIGHT MOVEMENTS STUDY' DISCUSSION PAPER (OCT 2009)**

BY IAIN EVANS MP – MEMBER FOR DAVENPORT

This derailment blocked the traffic on the Main Road from the Mitcham Hills and more southern suburbs (like Flagstaff Hill and Craighburn) travelling toward Adelaide. The traffic delays and congestion issues were significant.

On the very day of this derailment I called for the rail freight line to be moved to the north of Adelaide.

Mitcham Council joined the campaign about three years later and in 2007 produced a report 'A Bypass to Save the Heart of Adelaide'. This report also advocated moving the freight line to a new route north of Adelaide.

In the lead up to the 2007 election at a public meeting, I asked both Labor and Liberal candidates if they would commit to a \$3 million study into moving the rail freight line. Both parties agreed and adopted that as their policy.

I congratulate the Government on conducting this study.

SOCIAL AND OTHER ISSUES THAT SHOULD BE CONSIDERED IN THE STUDY

1. Noise

In the 1990s timber sleepers were replaced with concrete sleepers on the freight line. From this point of time on the complaints about 'rail squeal noise' increased rapidly.

The 'squeal' is an extremely loud, high pitched squeal generated from the metal on metal friction of the flanges and wheels with the rail. There are technically two high pitched squeals but for the purposes of this submission they are both covered by the words 'rail squeal' or 'squeal'.

I will not elaborate on the technical matters regarding this squeal. I understand they are well known to both Federal and State Governments, the Australian Rail Track Corporation (ARTC – the rail track owner) and GHD Pty Ltd. I recommend a briefing by the state Environmental Protection Agency to the consulting group if they seek clarification.

The squeal is totally unacceptable. It is constantly above any standard for rail or road noise set in Australia and greatly exceeds the World Health Organisation's guidelines for sleep disturbance.

The squeal is a health hazard and is intolerable in residential areas.

ARTC have made genuine attempts to address this issue.

As the then State Environment Minister, I changed legislation to allow each separate component of the freight rail system to be licensed by the Environmental Protection Authority (EPA) so the track, the locomotives and the rolling stock, through all the various owners, had to become licensed by the EPA.

This gave the EPA the opportunity to address the noise issues through a system of licensing and associated penalties.

As a result, ARTC spent around \$2 million developing 'RailSQAD' technology to try and individually identify which set of wheels were squealing. The technology works as follows.

The RailSQAD technology is placed right adjacent to the line at Heathfield, South Australia. When a train travels past, the technology measures the level of squeal noise. If the squeal

noise is above 105db(A) then a report is sent to the EPA, ARTC and the owner of the offending wheel.

Rolling stock and locomotives all carry individual identifiers (similar to barcodes for ease of understanding) which allow the owner of the offending wheel to be identified.

If a wheel makes at least 8 passes a quarter past the measuring device and offends by going over the limit on more than 20% of the time in any one month, then the responsible owner is required to take the offending wagon offline and maintenance/repairs undertaken.

Has this system lead to a reduction in noise? The short answer is No.

I refer you to 'Appendix 1' which is the RailSQAD results from the EPA.

These results show that the number of wheel squeal events exceeding 90 dB is increasing in both number and percentage of squealing events.

Note: The NSW Standard for road noise is 85 Lmax
The World Health Organisation standard for sleep disturbance is 60 Lmax.

Independent studies on rail noise on the freight line by Bassett (1999) and Vipac (1999) show the Lmax to be 80 dBA to 117 dBA (Bassett) and 95 dBA to 100 Dba (Vipac).

The above figures are from 10 years ago and are now likely to be worse as the trains are longer and heavier.

In other words, the independent reports show the rail squeal is way above acceptable standards

The EPA's independently measured results show that at the most recent rate there are over 30,000 squealing events per year exceeding 90dB. i.e. 30,000 per annum above acceptable standards.

This equates to one every 17 minutes, 24 hours a day, 7 days a week. This will only get worse with increased freight volume, increased number of trains and increased length of trains.

I recommend that ARTC and the South Australian EPA be interviewed regarding rail noise as I am sure they will advise there is no better solution to the rail squeal noise in sight.

Hence, any model – such as Option 1 – that suggest the line remain where it is, is rejected by my community because this effectively means the rail squeal noise remains unresolved with no solution in sight.

Any examination of option 1 must address the technical capacity to stop the noise and the cost of doing so.

2. Traffic Congestion

When the rail freight line was established in the late 1800's there was a very sparse population here in the Mitcham Hills.

Naturally with Public Transport came Urban Development and the Mitcham Hills now is a heavily populated, urban area nestled amongst the beautiful environment of the Hills.

With state and national population growth has come greater use of rail freight and hence the trains are now longer, heavier and more frequent than originally intended for the freight line.

The two issues – longer more frequent trains and a growing population, are in direct conflict with each other.

The Mitcham Hills is experiencing a rapid population growth through a new development at Blackwood Park.

It is half completed but on its completion 1,200 more homes will be in the suburb.

Flagstaff Pines further south adds another 300 homes. Blackwood Park increases the population of the Mitcham Hills by over 15 per cent.

According to State Government calculations, the increase in vehicle movements at the Blackwood roundabout is expected to be an extra 5,000 vehicle movements per day – just from Blackwood Park – there has been no other estimation done for the increase in traffic due to Flagstaff Pines.

Longer and more frequent trains will only add to the gridlock.

I recommend you interview the South Australian Department of Transport, Energy and Infrastructure and ask them what their plan is to deal with the grid-locking of traffic in the Blackwood area.

Any investigation of option 1 must include full costing of improvements of the traffic corridor from Cross Road to Black Road and South Road to Upper Sturt. This includes addressing the gridlock of traffic at Blackwood roundabout and all junctions on these routes.

3. Roseworthy College

The proposed route in Option Three appears to go through Roseworthy Agricultural College land. While I appreciate that the route outlined is only a very early draft any route should swing the track further North so as not to interfere with the college land or the Roseworthy township.

BENEFITS TO BE CONSIDERED BY THE GHD REPORT

If the freight line is moved to the north of Adelaide as per option 3, then the existing rail freight corridor becomes available for other uses. It could be used to improve passenger train service and/or create a bypass road.

The bypass road could be created between Blackwood Railway Crossing and Glenalta Railway Crossing by building a road where the rail freight corridor is.

This would re-direct most traffic from the south heading towards the city.

The traffic would then not have to cross the Blackwood Railway Crossing, not have to negotiate the roundabout and not have to cross Glenalta Crossing.

This would free the Blackwood shopping precinct of high volumes of commuter traffic and this would allow the Blackwood shopping precinct to be redeveloped in line with other precincts like Stirling or Burnside shopping centre.

In 2000/2001 the then Liberal Government started the process of upgrading the road infrastructure with \$1.8 million allocated to improve the Blythewood Road roundabout and the James Road/ Old Belair Road intersection.

In 2002 the new Labor Government cancelled this project and while the Blythewood Road roundabout upgrade was complete, the James Road/Old Belair Road intersection was cancelled and \$900,000 taken back and redirected to other projects.

So despite a significant increase in population and road traffic, no infrastructure has been upgraded to cater for the population increase or increase in train volume and length.

Blackwood roundabout is blocked most days every week with the morning peak period backing up 6 to 7 km from Blythewood Roundabout and the evening peak traffic blocking the Main Road and Shepherds Hill Road, Coromandel Parade and hence Blackwood roundabout.

This is before the last 600 more houses at Blackwood Park are built, before Flagstaff Pines is complete and before the trains extend to 1.8km.

Currently the trains can block two out of the three rail crossing in the Mitcham Hills (Blackwood, Glenalta and Coromandel Valley) at the same time.

These trains grid lock Main Road, the roundabout, Shepherds Hill Road and Coromandel Parade – all the major traffic routes.

A moving of the freight line removes the gridlock caused by trains.

If option 1 is examined, the study needs to cost all the upgrades to every road intersection with the track along the existing freight route. There will be huge costs in overpasses, underpasses etc to overcome traffic build up in the future.

If option 1 is examined the study needs to calculate the economic cost of the traffic congestion and gridlock right along the existing freight line if it remains.

FIRE

When the trains go to 1.8 km long all three railway crossings in the Mitcham Hills (Blackwood, Glenalta and Coromandel Valley) will have lights flashing and barriers down at the same time for a short period.

This means there is only one road open with a bridge over the freight line for residents trying to escape fire to use. All other major roads out of the district are blocked by the train.

Residents are very concerned regarding the increasing risk the trains pose during the bushfire period and their capacity to evacuate.

Waiting 7 minutes for a train to pass when people are trying to outrun a fire could lead to many deaths.

Even with current train lengths, the risk of fire with traffic delay is significant as two crossings are closed waiting for the train to pass. The traffic is still gridlocked.

A derailment as in 2004 at any crossing would permanently block access in time of fire. This would be an absolute disaster.

I understand ARTC has no plans to stop trains on the line on bushfire days.

This risk is removed if the line is moved north of the city.

WATER CATCHMENT AREA

When the 2004 Glenalta derailment occurred, I noticed there was a number of rolling stock carrying 'dangerous goods'.

Even as the local Member of Parliament I could not find out what was being carried.

The current railway line travels through the Water Catchment area for Adelaide's drinking supply and derailments incorporating dangerous goods could be a serious risk.

Moving the freight line removes the risk

HEALTH IMPACTS OF RAIL NOISE

Residents have advised me that the noise is so bad it hurts their ears. Some wear earplugs when they are outside.

Others complain of ongoing and regular sleep disturbance.

I have requested the State Government to conduct testing of residents to identify health issues related to train noise. They have refused.

Removal of the line removes the health risks.

If option 1 is considered as part of the study then the study needs to cost health testing and treatment for affected residents.

THE ADELAIDE AIRPORT NOISE ABATEMENT PROGRAM

I wrote to the Federal Minister to request they fund a noise abatement program similar to that received by residents living close to Adelaide Airport.

This program cost the Federal Government million of dollars and provided noise reduction solutions like double glazing.

The Federal Government have refused to provide a similar program to the residents impacted by rail noise.

If option 1 is included in the study then the study needs to include the full cost of a noise abatement program.

CURFEW

I am aware that some residents are making submissions asking for a curfew on freight trains between midnight and 6am – similar to the curfew operating at Adelaide Airport.

I have previously spoken with ARTC regarding a curfew and they advise it is virtually impossible to implement at present due to the lack of 'parking' area for trains that are linked into national timetables for track access.

OPENING THE BAROSSA TO TOURISM

The Melbourne Express runs on the same track as the freight line. Hence the Melbourne Express is moved at the same time as the freight line.

If the freight line is moved to the north of Adelaide then the Melbourne Express passenger train could break up the trip with an overnight stay at the Barossa.

Adelaide – Barossa overnight – Melbourne or Melbourne – Barossa overnight – Adelaide.

This would have a huge positive impact on all the tourism industry in the Barossa Valley and surrounding areas.

Hence, option 3 supports this concept. This economic benefit should be calculated into the study in support of option 3.

PASSENGER TRAIN SERVICES

Under option 1 and option 4 what modelling has been done on the impact on the level of passenger train service to the Mitcham Hills?

The residents require an improved service not a reduced or more restricted service. Any consideration of option 1 or option 4 (which is rejected by my electorate) needs to include the question of the impact on the passenger service. If there is a likely reduction or restriction in service this need to be costed in option 1 and option 4.

COMMENTS ON THE OPTIONS

I note there are five options and option 2 and option 5 have been discounted. I note that on that basis the costing is plus or minus 50%. Option 2 may well end up an option worth considering.

Option 1 – Upgrade the existing track

This option is totally rejected. My electorate are totally opposed to this option. Some of the reasons this option should be rejected are:

1. The rail squeal noise remains in place and grows longer and more frequent
2. Traffic congestion increase due to increase in train length and traffic volume
3. Traffic congestion becomes more frequent as trains become more frequent
4. Health impacts increase due to noise increase in length and frequency
5. Bushfire risks increase
6. Water catchment risks increase
7. The opportunity to create a bypass raid in Blackwood and/or improve passenger train services is lost
8. The opportunity to beautify Blackwood shopping precinct is lost
9. The opportunity to bring tourism to the Barossa is lost
10. Of all the options it delivers the lowest capacity (23.6 m+pa)
11. Transit time does not improve at all

Option 3 – Northern Bypass

The vast majority of my electorate support option 3. I support option 3.

The reasons I support option 3 are

1. The noise issue is totally resolved and is highly unlikely to occur on a newly constructed line built to the latest design standards on relatively open flat land
2. Mitcham Hills traffic congestion is largely resolved
3. A bypass road could be built between Blackwood Crossing and Glenalta Crossing on the current freight line ?
4. Trail walking, bike lanes and horse tracks could be introduced on the freight line corridor east of Belair/Glenalta and add to the tourism experience
5. Better passenger train services could be provided between Adelaide and the Mitcham Hills and a two track system could be installed or other public transport initiative considered such as an O-Bahn
6. Capacity is increased to nearly four times current levels
7. Transit times are the quickest of all affordable options
8. Tourism opportunities increase in the Barossa Valley

An Addition to Option 3

If option 3 is considered I believe that the transport corridor should be wide enough to take a road for road freight transport.

While the road may not be built as part of this project, if it were built in the future it would remove most of the heavy road freight trucks from the Port South Road/Grand Junction Road/Port Wakefield Road route.

This would have massive social benefits and for residents of those suburbs and free up Adelaide roads.

Option 3 should include a recommendation that the transport corridor be wide enough to take a road.

Option 4 – Southern Bypass

A very small number of people in my electorate have supported option 4 with a fall back to option 3 for economic reasons.

The reasons for support are as per option 3 above.

I don't support option 4 for these reasons:

1. The freight line still runs through metropolitan suburbs north of Cross Road when option 3 removes that problem altogether. i.e. traffic congestion, noise etc shall stay in these suburbs.
2. Transit times to Perth – which is the corridor expecting the greater growth in freight is slower than option 3.
3. No greater capacity than option 3 but at a cost of \$1 billion extra
4. If the government was minded to spend the \$1 billion extra in South Australia I believe there are more worthwhile uses than picking option 4 over option 3. The road corridor in option 3 above for example.

TOUR OF MITCHAM HILLS

If the consultants or the Federal Minister's Agency or Staff or Department wish to tour the Mitcham Hills to look at these issues I am more than happy to take them on an inspection of the areas so they are better able to understand the issues.

APPENDIX 1

Tables from the EPA Report, December 2008

NUMBER OF SQUEALING EVENTS EXCEEDING 105 dB

Quarter	Number of WhlSql1 Events
Oct-Dec 08	391 events
Oct-Dec 07	426 events
Oct-Dec 06	498 events
Oct-Dec 05	291 events
Average	401.5 events

Quarter	Number of Flng1 Events
Oct-Dec 08	33 events
Oct-Dec 07	151 events
Oct-Dec 06	177 events
Oct-Dec 05	119 events
Average	120 events

NUMBER OF SQUEALING EVENTS BETWEEN 90 AND 105 dB

Quarter	Number of WhlSql2 Events
Oct-Dec 08	2032 events
Oct-Dec 07	1114 events
Oct-Dec 06	1119 events
Oct-Dec 05	901 events
Average	1291.5 events

Quarter	Number of Flng2 Events
Oct-Dec 08	5050 events
Oct-Dec 07	4629 events
Oct-Dec 06	4915 events
Oct-Dec 05	3347 events
Average	4485.2 events