Bill Craig

The Chairperson,
IPART

RAIL DEFECIT

Dear Sir,

I am concerned about the continuing statements that the rail deficit is so bad. I am a transport observer and consider that the Government is being ill advised on directions to take especially considering circumstances approaching in the near future. I consider that if the appropriate steps were taken to curtail this appalling outpouring of funds and directions other than the present direction of cost cuts being used as the solution. Cathay Pacific is loosing the same amount of money each day and attitudes of the media was of a helping mode where stories displayed around Cityrail were damning!

CONSIDERATIONS

There are a number of factors that have aggravated the situation around the Cityrail expenditure that could have been treated in a better way.

- **There is only the core operation left in Cityrail.** Any opportunity to make money to offset expenses is now gone. The sale of food services, small parcels operations, land asset usage, billboard advertising has been removed.
- **Successive Governments** have compounded the problem by not placing development monies in the right areas to be effective. Is this deliberately done to run the system down? It was old Henry Ford who said, "Every car on the tracks is a thousand cars less I can sell!"
- **Trip generation** in the Sydney area has an increase of around 5% per year. Cityrail thinks it is doing well by getting a 5% increase in patronage. This is loosing market share by 5%. For Cityrail to get a 5% increase in real terms, it must get a 15% increase each year!
- **Public transport is being marginalised** and starved of funding in many quarters. Where road projects come in over budget and ahead of schedule, in comparison, public transport capital improvements are being further delayed and their funding is being diverted to roads. Take the Chatswood – Parramatta rail link - $300 million is being diverted to the improvement of Windsor Road!
- **Too much money is going into roads.** They are absorbing funds, which should be going into schools, hospitals, social amenities and public transport. Even money for rail projects is being diverted into road projects to get them finished on time. Rail development is being further delayed.
- **Private toll roads** are the best equity generator for investors in this country. Your must realise this: **it will cost the private operator nothing to construct!** We the users will pay all that extra money for them! Whether government or private – **we will pay for it!** Private roads will reap 1400% profit in their 30 years. Government operations merely have to pay their way at best. <u>They already belong to us!</u> They don't have to make a profit! This is why government public transport is cheaper than the private buses in the west. Government roads are cheaper to construct and operate than BOOT systems of the private roads because we pay the equity to the private company in tolls for an excessive time. The SLR is similar with their inflated fares.
- **The Airport Line** with its high surcharge is an obvious failure! If $2 were charged, every bus, taxi and many private cars would not be taking people to the airport! Is this merely greed or to ensure rail partnerships would fail?
- **Progressive thinkers have been thwarted.** For example, Kim Finnimore has been vindicated with tilt trains in combination with high voltage electrification and remedial track improvements. They have revolutionised rail operations in Europe with dramatic patronage increases on their intercity services. Many here think this type of operation is not suitable for NSW.
- **The Cumberland Line** could have been the "Illawarra Line of the West" with a little interest! Unfortunately, Cityrail considers this line as a "minor operation". If it came to Campbelltown in the Peak Period, many would not use their cars. As a result, would 1200 people per hour in cars make a difference on the M5? Yes! An already congested M5 with an additional ½ a lane hour of cars dumped on it makes a considerable difference!

Consequently, $2 billion of road projects has been authorised including the Western Orbital. This example shows that rail systems will provide the solution to many of the traffic woes in Sydney. This $2 billion would go a long way to providing rail solutions to most of the Sydney rail network. The Sydney private ring road will total around $12 billion. How much of this "investment" is Government money and how much is private?

- **Governments are readily able to give support and funding to roads.** Not only that, Departments of Transport are becoming Government arms of multinationals. Indeed, organizations such as the RTA represent more and more the interests of those companies. It must be realised that we almost have a fully imported road transport system! Even the black stuff on the roads is imported! What small portion of cars, spares and tyres that are made here are mostly owned by foreign interests!

REMEDIATION.

There are a number of ways that can make a difference to the way Cityrail operates. Cost reductions can be made to get Cityrail back into an acceptable performance zone. For too long the traditional form of cost cutting has been done which has removed skills and knowledge making the operation insipid. Some suggestions.

Electrification

- **The electricity supply** can be reduced in cost. Give the railways back their power station at Wallerawang. Their ability to generate their own electricity at cost and sell any surplus at off-peak times gives them an additional income.
- **Long aging interurban sections** of equipment should be replaced with 25000 volts AC (25KVAC). A good example where this can be done is over the Blue Mountains to Lithgow where it is expensive to maintain this older equipment. With less copper needed and aluminium support wires used, overall weight would be much less. Rehabilitating existing support towers (where necessary replacing only) by sand blasting and modern epoxy paints would be sufficient. This can be done for around the scrap copper value of the existing system! Only vehicle s needed in this section require modification. Begin at Lithgow to Katoomba and come east to Springwood later. The next generation can have this equipment included.
- **Further electrification extensions** in the interurban area should be 25KVAC. The cost of this system is dramatically reduced compared with the older 1500VDC. Initially, the "red rattler" vintage equipment needed this style of power feed because the electronic power control systems were not invented then and solid state devices were only a recent development. For $130,000 per kilometre as against $1 million per kilometre, installation costs are dramatically reduced as well as maintenance costs also reduced dramatically. Power feed stations can be located 15 to 60 kilometres apart compared with 3 to 15 kilometres of the old system. The Kiama electrification extension consumed the same money as electrifying all the way to Bomaderry in 25KVAC! This would remove the need for expensive diesel powered vehicles.
- **Include the 25KVAC/1500VDC dual voltage equipment in the new interurban vehicle order**. If this is not done then this is another method of maintaining the present inefficiencies around the old style 1500VDC electrification.
- **Modern traction methods** need to be applied to vehicles. With Asynchronous AC motors as in the latest equipment, merely greasing the bearings at 2 million miles is all that is necessary!
- **The expensive upgrade of the present metropolitan system** with galvanised stanchions and additional constant tension contact wires only goes to show the inadequacy of the present system. Although this cannot be replaced due to bridge and tunnel clearances in the metropolitan area, the additional energy requirements of later vehicles displays the need to beef up the power feed equipment. What is needed in time is the requirement to do remedial corrosion control as is needed on the Campbelltown line, the first section of this heavier galvanised construction.

Signalling

- Modern installations are not much good if performance and **failures are not eliminated**. When a particular portion of the system fails due to lightning, rain water etc, this portion should be upgraded to deny this part failing again.
- **The signal spacing out here in the West** is too big. On occasions, due to problems in the Campbelltown yard, trains were as far back as Liverpool waiting to end their journeys. At

some places on the East Hills Line, there is a signal stand at the end of platforms and only one signal stand between platforms. This incurs delays when failures or slow running is experienced. Improvements must be done without compromising safety.

Operations

The problem with most train services is that they are not conducive to increasing patronage. Is this because they stop people buying cars? If this is so, then there are to be some large attitude changes! Again, the Cumberland Line is a good example of this mentality. **It could have reduced road expenditure by around $2 billion.** This money could have done most things that need fixing on the rail system to correct many of the problems. The Cumberland services could go toward solving the problems of the 5 small CBD's in the West that are experiencing road traffic problems. This is displayed in the paper **Greater Western Sydney Public Transport Strategy** (DOT 1997). As a result, the rail system goes begging again and deplorable news publicity attributed to bad operations. Why do road operations get the good light and rail the thumbs down? Let me give you some examples.

- Even though **the M5 is a parking lot** for 10 hours a day, it is billed as the "way to go" and "the salvation of our transport woes". With the private ring road around Sydney costing around $12 billion it is only an equity magnet for private investment!
- **Track quality** in many places inhibits good rail operations. For example, Campbelltown to Goulburn. There are a dozen or so places on this path that have restrictions (excluding Douglas Park to Bargo) reducing freight train speeds. This amounts to around an hour extension in transit time over this section. $70 million would remove these impediments. Freight costs of $3,500 per hour could be saved. At 20 trains per day, this is $490,000/day or $25 million per year. An 18-kilometre bypass between Douglas Park and Bargo costing around $200 million, which includes some large bridges across the Nepean River, could save a further 30 minutes for freight or another $12.5 million per year. In total, 1½ hours for $270 million would take only 7.2 years to recover costs.
- The above improvements of $270 million for 1½ hours off the **Sydney to Canberra trip** is considerably cheaper than the $5 billion spent collectively on the Sydney to Canberra road to get the transit time of private buses departing Sydney Terminal down to 3 hours!
- **Off-peak trains** do not need to be 8 car sets. For the 5 hours between 10am and 3pm, $100 per carriage hour on the tracks, 100 trains, this is $40,000 per hour or $40 million per year.
- **Alternatively**, these 4-car trains could improve off-peak frequency to 15 minutes on most lines reducing customer inconvenience. Gaining 100,000 extra trips per day at an average $5 would improve the fare box by $500,000 per day or $100 million per year. Bus patronage would rise and car usage would decrease.
- **A rail ring around Sydney is needed**. It can be constructed if the Parramatta – Chatswood line comes to Granville. Linked with Liverpool and the East Hills Line, people have the opportunity to get to destinations quickly or unavailable to most of Sydney's travellers on the rail network. This will save $450 million.
- **The approach of management** that one 8-car train per hour can carry as many people as a 2-car 15-minute service. This means an 8 car set running around in the off-peak with a basic service and 50 passengers. The Millennium cars should have been built as 2 car sets. This means capacity could have been reduced in the off-peak periods and maintain a peak frequency. One-man operation is also possible.
- **Double decker trains have one basic problem.** They cannot load and unload quickly. Was this design factor seen early and maintained as a method of reducing patronage? This is displayed around the City Circle. Around 24,000 people are the maximum per track. In the "red rattler" days, headways of 90 seconds and a capacity of 40,000 people was a regular occurrence. Again, single decker stock could be used on the inner circles of Bankstown and Liverpool if connected to East Hills. Vehicle productivity in passenger kilometres approaches the double decker types if the consideration of 30 seconds per stop less is gained in the peak hour. **Transit times of 25 minutes less to complete these circles would mean reduced numbers of trains to do the same job.** There are sufficient double decker vehicles for the outer area. **The next order of suburban trains must be this type.**
- **Small infrastructure improvements** located in the right places can make dramatic improvements in operations and efficiencies. The end result is a much better service to the customer. An example, a triangle at Glenfield enabling trains to go from East Hills to Liverpool. This means more people can get to the airport; work locations are available to 2 isolated yet adjacent parts of the network and travel would be both ways improving productivity. Terminating vehicle track time is now turned into productive value.

Terminating trains and return is a way of reducing fleet availability and hence passenger carrying capacity.

- **Frequency affects customer perceptions.** If a 30-minute service is not arriving, a 1-hour wait is possible if the last train was just missed. With a 10-minute service, to the customer, if trains are running 10 minutes late, they are on time! **Frequency is directly proportional to customer convenience.**
- **Vehicle life** is not considered when costs are expressed. A Cityrail carriage costs around $3 million and can carry up to 200 passengers at an average speed of 50KPH and has a life of around 60 years. A bus costs around $300,000, carries 60 passengers at an average speed of 35KPH and a driver is necessary and lasts 12 to 15 years. The cost of 20 buses over 60 years to do the same job is $6 million.

WHY SHOULD THESE THINGS BE DONE?

- **We have a rapidly aging population** because of us "baby boomers." It is recognised that 500,000 people could have dementure or Alzheimer's conditions in a decade or so. This is mainly because of the "baby boomers" reaching that age group. Adequate public transport could mean that these people do not have the need to drive a car. This is one aspect of a possible increase in road accidents and fatalities.
- **Fuel use** is increasing at about 5% per annum in Sydney. At present, consumption is around 22,000 tonnes per day. Prices will increase rather sharply in the near future.
    - The world consumes 24 billion barrels of oil per year or 3.8 cubic kilometres.
    - World demand is rising by 2.5% per annum.
    - Demand will exceed supply around 2008.
    - Australian oil will be all gone around 2010. We import 70% of our needs now.
- If there are not so many cars on the roads, **road space** is not a demand and other factors like air pollution and road noise will decrease.
- **Road congestion** is demanding more roads because transit times are increasing. More and adequate public transport will reduce the need and demand for road expenditures. Roads at present are consuming funds for hospitals, schools, social amenities, public transport etc.
- **We need suitable mass transport systems** for the disadvantaged, principally the under 16 and the over 60 age group left out of the car society.
- We have the **death and injury** rate on the roads of a medium sized war.
- Many of our population are being **left out** of the "Australian Dream" because they don't have a car and cannot get a job.
- We have regular **pollution** counts up there with Los Angeles.
- **Mobility is decreasing** due to an excessive number of vehicles and no road space. Alternative transport to the car in most places in the west is sporadic or non-existent.

CLOSING COMMENTS

I consider that most of the comments made above are basic and low cost. Some will need some expenditure due to long-term neglect. In a business sense, why has this not been done? These are the things conducive to firstly improving what is already there to peak performance and then launching expanded operations when this is achieved.

For example: the "failed" timetable really should have been maintained and the problems solved such as 13 terminating trains per hour blocking activities at Liverpool. There were around 1000 people dumped on Liverpool platform at around 4pm waiting for a train to Glenfield. I saw dramatic improvements of patronage, which means fewer cars on the road. At Burwood, my train via Liverpool stopped there. At the start if the timetable introduction, merely 20 people got off. At the cancellation, the whole of the last 2 carriages got out! The Telstra car park was half full. This is a good indication that appropriate transport for the people will gain custom. This example is how trains can solve the road congestion problem. Is this not to be done due to contracts with private road operations or influence from the RTA?

Attitudes are a big problem. Why is it considered that money spent on roads is an "investment" and money spent on rail is a "subsidy"? I consider that this should be the reverse! **Money spent on roads is a subsidy to foreign multinationals and money spent on rail is an investment in the future!**

Attitudes must change. The case for public transport is very bleak without the support of Governments. Yet Governments are readily able to give support and funding to roads, even with the approaching congestion and world fuel problems. Getting people out of cars can reduce congestion, pollution, road deaths etc. Again I say, Departments of Transport are becoming Government arms of foreign multinationals. Indeed, departments such as the RTA represent more and more the interests of those organizations and not the people it serves. All is for cars and not people! It must be realised that nearly all cars are imported, most tyres and 70% of fuel is imported as well as most spare parts are imported and owned by foreign multinationals. What small portion of cars, spares and tyres that are made here are mostly owned by foreign interests! Yes, we need trade – but we need it both ways and more importantly, to our advantage! We are constantly in deficit as a result. Are we merely a consumer colony of Japan or the US? Think about it.

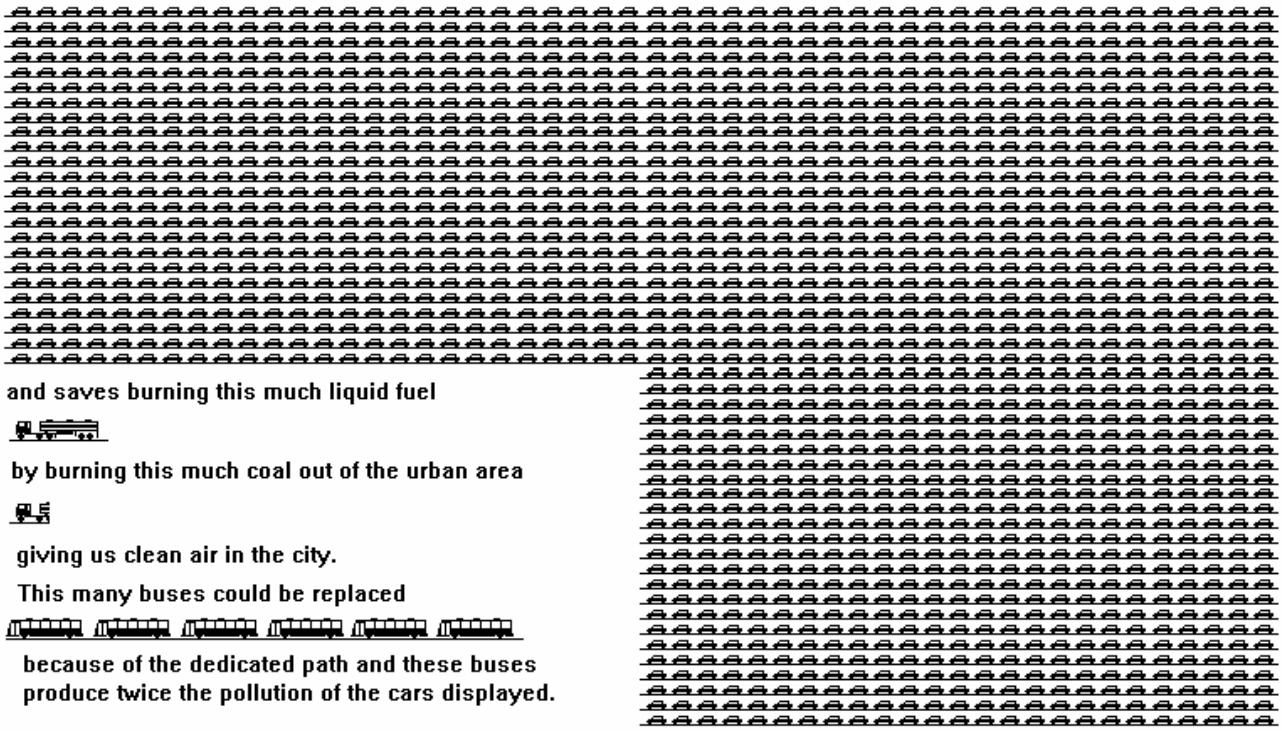
I hope this is of some value towards solving some of Sydney's problems.

Yours sincerely

Attachments

This one tram (light rail vehicle)

does the same transport task as these cars in the peak hour



and saves burning this much liquid fuel

by burning this much coal out of the urban area

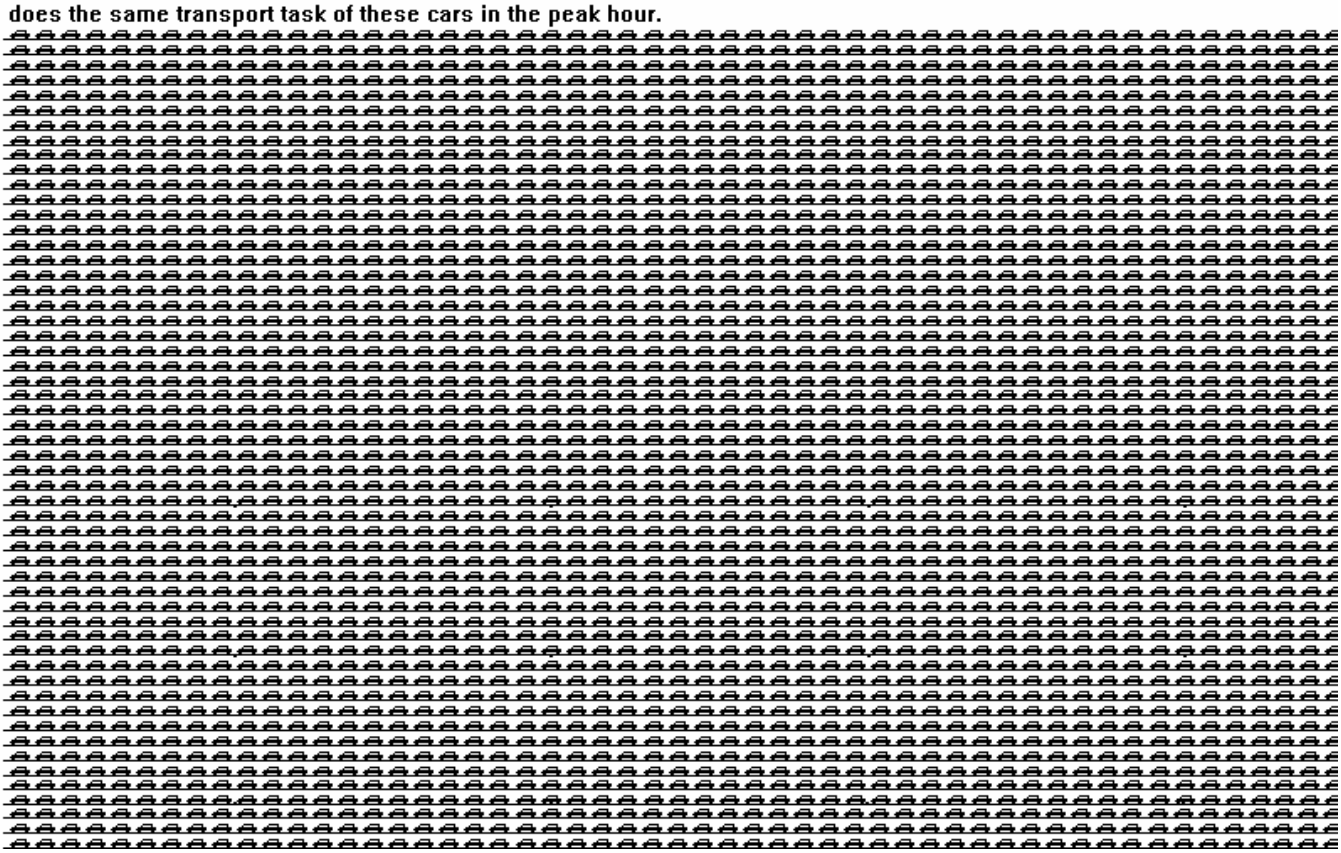
giving us clean air in the city.

This many buses could be replaced

because of the dedicated path and these buses produce twice the pollution of the cars displayed.

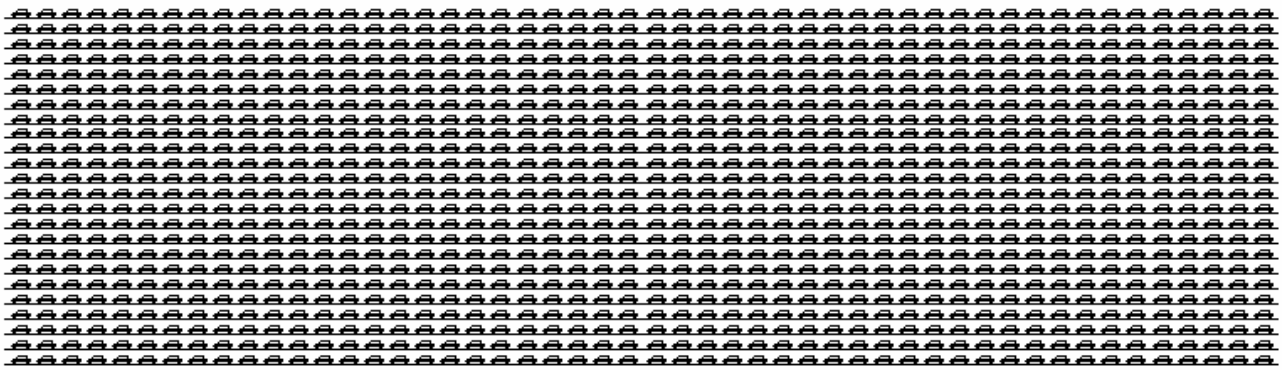
This 8 car Tangara train set

does the same transport task of these cars in the peak hour.



One trip of an 8 car Tangara train between Campbelltown and the Sydney CBD

does the same transport task as these cars in the peak hour



and saves burning this much liquid fuel each trip

by burning this much coal out of the urban area

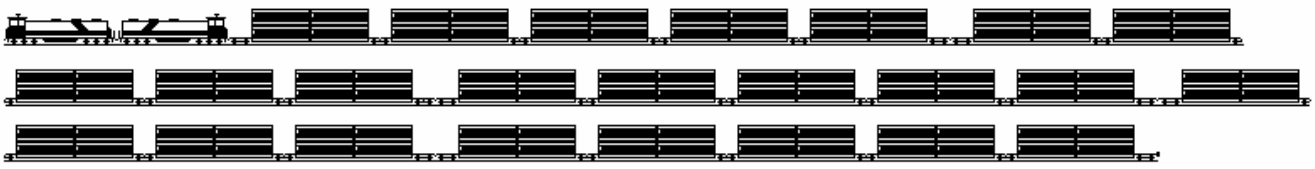
giving us clean air in the city.

Each year, this train saves burning 4,200 tonnes of road fuel in Sydney and consumes 370 tonnes of coal out in the country.

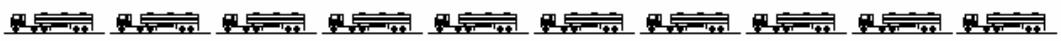
AN INTERCAPITAL TRANSPORT DILEMMA.

All these trucks

could be replaced by this train.



This much fuel could be saved as well, each trip!



Each trip of this tilting train between Sydney and Canberra

does the same transport task as these cars

or these buses

or this plane

and saves burning this much imported liquid fuel each trip

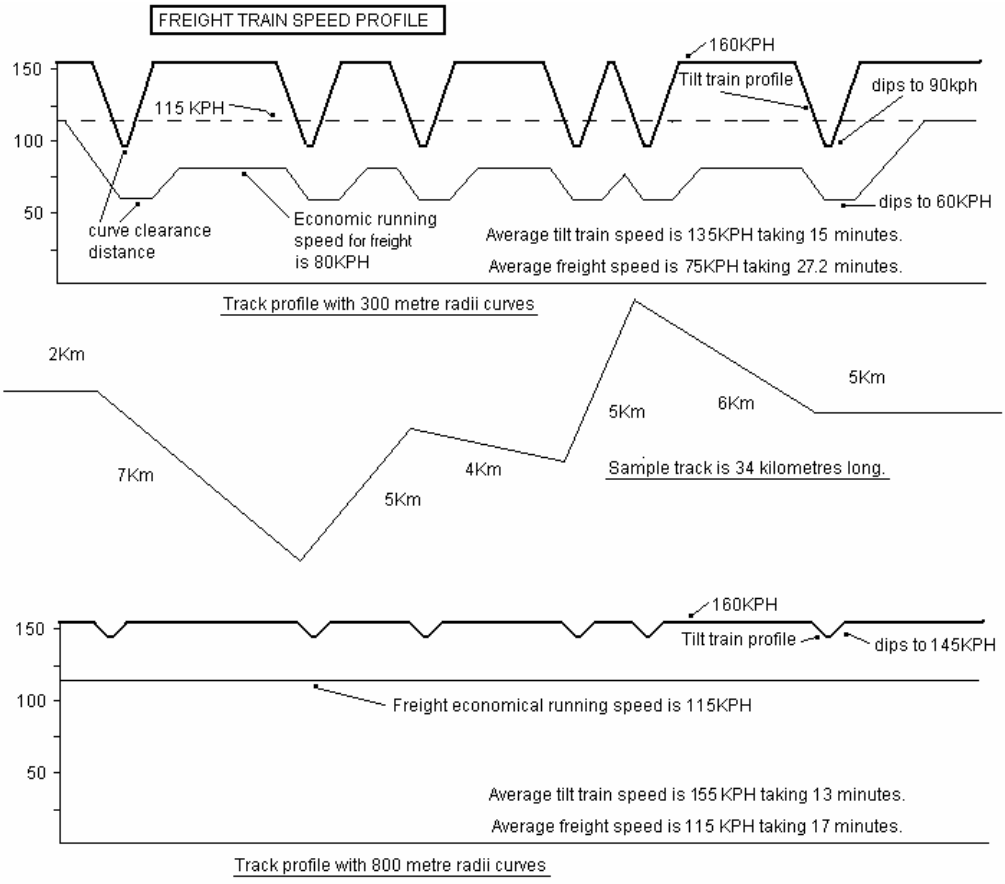
by burning this much coal

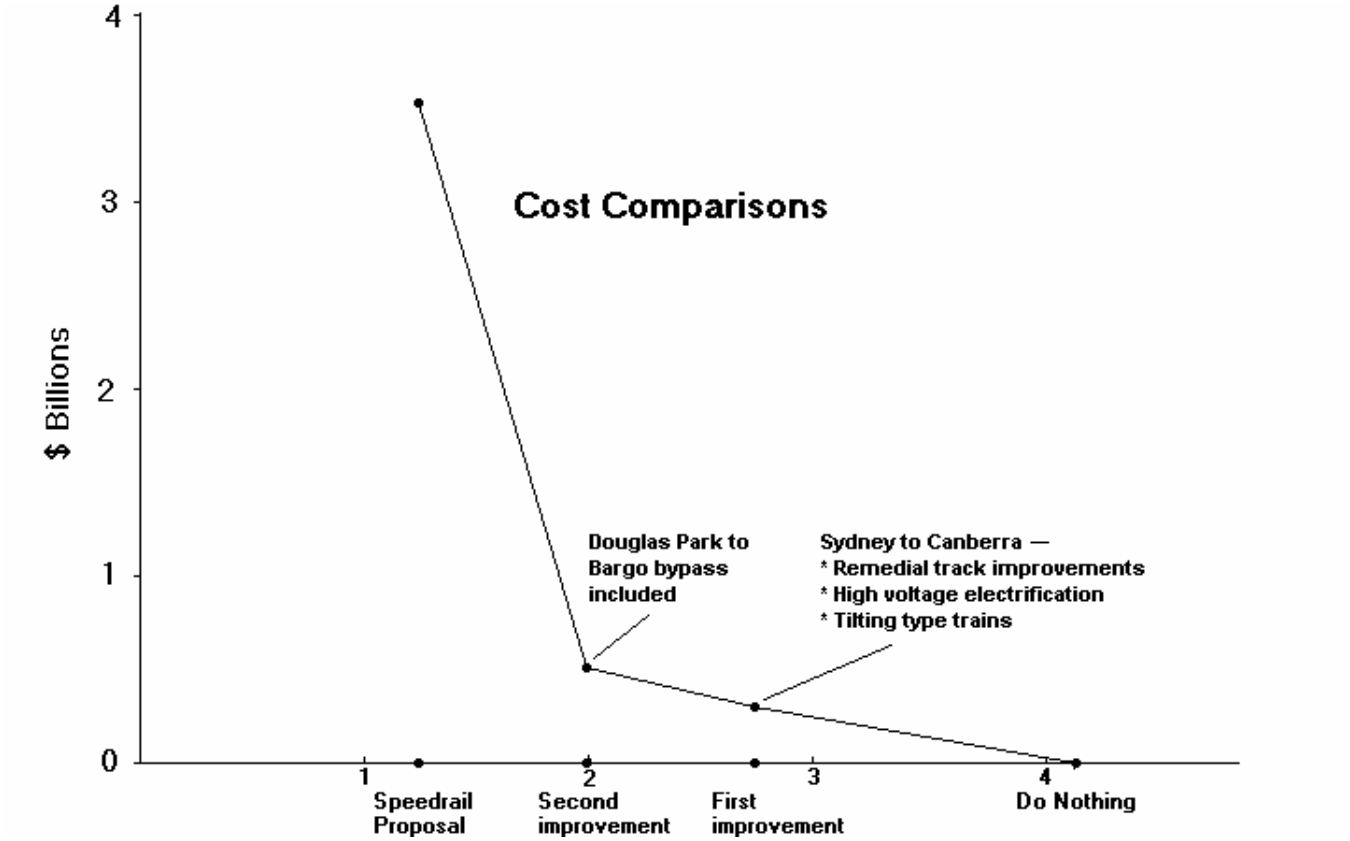
giving us clean air.

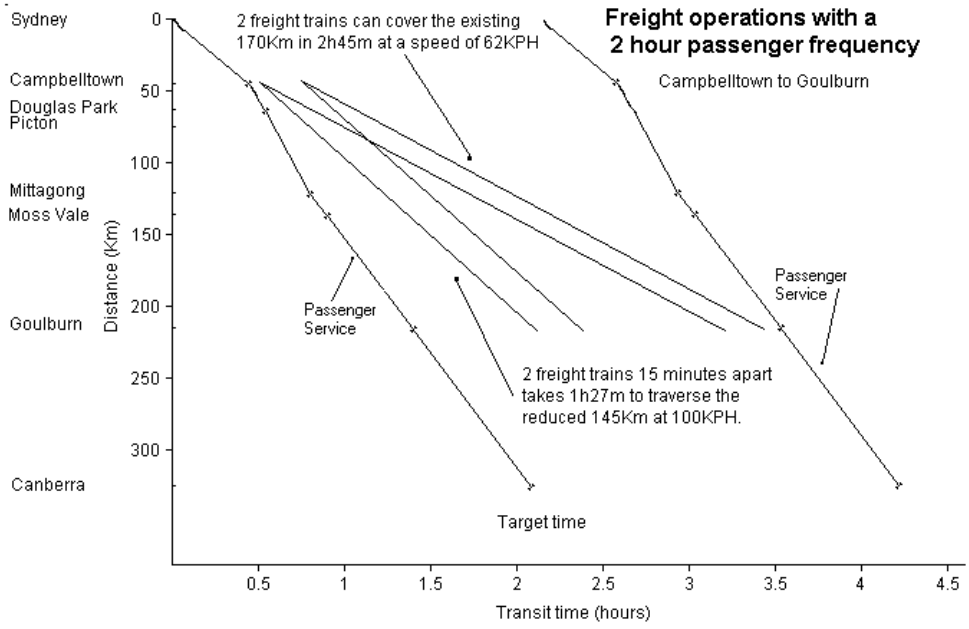
Each day, two trains on this service would give an estimated fuel saving of
21,328 litres of fuel @ 16 litres/airline passenger,
26,660 litres of fuel @ 20 litres/car passenger.
6665 litres of fuel @ 5 litres/bus passenger.
This is assuming that the extra patronage attracted is 1/3 from each other mode.

In addition, reduced road costs, reduced road deaths and trauma for families, reduced insurance payouts, reduced fuel imports, reduced car trip kilometres would also result.

The greenhouse gas savings per year by this rail service is around 240,000 tonnes.




Cost Comparisons
$ Billions
4
3
2
1
0
Douglas Park to
Bargo bypass
included
Sydney to Canberra —
* Remedial track improvements
* High voltage electrification
* Tilting type trains
1
2
3
4
Speedrail
Proposal
Second
improvement
First
improvement
Do Nothing


Freight operations with a
2 hour passenger frequency
Campbelltown to Goulburn
2 freight trains can cover the existing
170Km in 2h45m at a speed of 62KPH
Sydney
Campbelltown
Douglas Park
Picton
Mittagong
Moss Vale
Goulburn
Canberra
Distance (Km)
0
50
100
150
200
250
300
Passenger
Service
Passenger
Service
2 freight trains 15 minutes apart
takes 1h27m to traverse the
reduced 145Km at 100KPH.
Target time
0.5
1
1.5
2
2.5
3
3.5
4
4.5
Transit time (hours)