

**Submission**

**No 34**

**INQUIRY INTO THE UTILISATION OF RAIL CORRIDORS**

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Legislative Assembly  
Committee on Transport and Infrastructure  
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Rick Banyard



28<sup>th</sup> February 2012

## **Submission Utilisation of rail corridors.**

I wish to make a submission to the Parliamentary committee examining the utilisation of rail corridors.

I have attempted to address all the issues listed in the terms of reference.

The first point I wish to raise is the lack of publicity about this Enquiry and the fact that important sectors of the community have not been made aware of the issues to be considered.

By way of example I use the Newcastle Electorate which is the seat of the Deputy Chair of the Committee and the fact that the rail corridor is a major issue in the community. I have raised with Mr Owen the issue of lack of awareness and his failure to draw the communities' attention to the issue. I did suggest that he should hold a workshop in order to brief the community and raise discussion about the options and the Enquiry.

I also wish to express concern that Chair of the Committee may have swayed the outcome by making a statement reported in the Sydney Morning Herald in relation to his wish for the outcome.

I also consider that there should have been a discussion paper and a list of terms distributed with the terms of reference. Maybe the terms definition could be part of the final report.

## **Definitions and assumptions.**

The terms of reference talk about **air space**. I assume this means everything from the ground surface skywards however excludes the space occupied by existing and future train use.

The **space occupied** I assume includes all the space required for the train to function in a safe manner.

The terms of reference also talks about **adjacent land**. I assume this means everything within the rail corridor perimeter fence and also includes government owned land (excluding public roadways) that abuts the rail corridor fence. This could include bus terminals, car parks and parkland.

I assume the term **commercial activity** relates to the activity of business ventures directly related to providing goods and services to the railway and rail passengers.

**Development** is commercial activity that may not be directly related to the rail provision.

A **point to point** journey is a trip from the place of departure (eg House) to the place of destination (eg Cinema)

## **Introduction and General Comments**

Some rail stations have minimal corridor space eg Pymble whilst others have extensive corridor space like Central.

Rail corridors traditionally were set aside for the future. Over the last 50 years there has been little land set aside as transport corridors despite growing populations and growing demand for freight movement.

I would like to recommend to this Enquiry that they recommend that a future enquiry be conducted to investigate the needs for establishing new transport corridors, for the recommissioning of previously closed corridors and the improvements necessary to upgrade the existing corridors.

The rail corridors are a very important asset and parts of those corridors that are not required for operational purposes should be put to use. That use must be only temporary as the site may not be required for operational purposes for some time.

Except in very rare circumstances no corridor land should be sold. The needs of the future are unknown and in all circumstances the corridor should be preserved. Any leases that permit temporary use must stipulate that any structures or site degradation must be removed and the site left totally clean at the end of the lease.

All leases for air space must be properly documented commercial grade leases and must not impinge on the rail authorities conducting maintenance, upgrades or expansion.

The notice period to any leaseholder should not exceed five years.

There is a very wide variety of uses for the air space that should be considered when examining this topic.

Broadly these uses fall into three categories

- # Recreational and community use.
- # Commercial
- # Development

Let me explain each in turn

### **Recreational and community use.**

Recreational use is primarily the use of the ground surface for the building of play grounds, adventure areas (maize), public art, parkland and landscape features.

By way of example the Newcastle rail corridor must retain the heavy rail line into Newcastle Station as it is the most important asset the locality has and is not only a fundamental resource to the areas revitalization but also a very important part of the CityRail rail travellers network.

The corridor has many critics and their arguments are based on two key areas. Firstly it's ugly and secondly it disrupts connectivity. Both these issues are readily addressed and the solutions cheap.

The land between the rail line and the corridor boundary could be cleaned up and landscaped. The cleanup could include the removal of the fence and the landscaping could include the installation of water features or barriers that are attractive and give a visual linkage between the inland and the foreshore.

The issue of connectivity could be incorporated in the landscaping by for example encouraging people to cross the line with a new style of crossing and with the connection of buildings by high set walkways.

Obviously these principles apply to all corridors under examination by the Committee.

The major issue with rail crossings is safety.

At grade crossings have a measure of safety called ALCAM (Australian Level Crossing Assessment Measure). These rules are now managed by the National rail safety authority. This score card method makes it very difficult for new at grade crossings to be installed and threatens the continuation of many existing at grade crossings.

The ALCAM rules apply to all classes of rail. This includes heavy rail, light rail, PRT's and monorail.

Many of the overhead crossing also have very serious safety issues due mostly to people's stupidity. This includes throwing objects from the bridges and jumping from and or climbing on the structures.

Statistics show that overhead crossing like bridges are far more dangerous than at grade crossings.

I am unaware of any crossings that generate revenue, are self funded and or add a tourism attraction to a locality. There is simply no reason why not.

Some railway station entrances are revenue generating. Wynyard is probably the largest example.

Most stations and station entrances have commercial activity. These include vending machines, cafes, news stands and gambling kiosks.

This Inquire should encourage this activity and also encourage the opportunities to generate revenue from within the train.

The attachment 3 to this submission includes a number of examples of conceptual crossing that all could be applied to the Newcastle / Hamilton rail corridor and other situations. All that is needed is a little imagination.

The Committee needs to remember that there are very long lengths of rail corridors that have no connectivity for even pedestrians. This a major contrast where there are 10 crossings in the very short section between Newcastle Station and Hamilton.

Connectivity is frequently an issue of perception rather than an issue of fact.

The Committee needs to also recognize that freight trains also provide a very major barrier to connectivity. The Clyde St railway crossing and the Adamstown crossing are both blocked by freight trains for long periods of time. An 8 car passenger train usually clears a crossing within 90 seconds however a freight train of 80 wagons or more can take 15 minutes and longer.

Attempting to shorten passenger trains or use lighter versions of rail travel may in fact increase gate closure time. 1000 passengers on an 8 car set will close a major

roadway such as Stewart Ave at Wickham for 90 seconds. The same number of passengers ferried by light rail will close the crossing for 19 minutes (the calculations are available on request). The two car sets as suggested by the Newcastle Herald's Independent Transport Initiative study will result in 12 minutes of closure. Clearly an unacceptable price for motorists and the community to pay.

The solution to Stewart Ave is not to fix the train but to fix the roadway. A cutting should be constructed for the roadway from north of Wharf Rd to south of King St. This cutting would not only eliminate the rail crossing but also the three major road junctions. This would be an example of combining railways air space with other infrastructure generating an effective and relatively cheap solution to a complex problem.

Increased coal freight, the capacity increase of the container terminal at Port Botany and the community expansion will place major pressure on the rail corridor and its crossings.

On the Hunter rail lines there are a number of freight haulage operators and all are planning major expansion. One operator QR National is about to construct a new train service centre at Hexham. This centre will allow the company to increase its current 10 trains to 38 trains by 2019. This is a massive increase especially considering a coal train has about 80 full length cars and a total weight of about 10,000 tonnes.

It should also be noted by the Committee that expansion such as the QR National project also has a major impact on the road transport corridor. The fuel consumption of these new trains will require 12 B Double heavy trucks (fuel) and 4 semi trailer (sand) movements per day. Obviously there will be other vehicles for staff and supplies etc.

The Hexham train service centre is a good example of corridor, corridor air space and privately owned land combining for a common benefit.

Clearly rail corridor air space (and below track) needs to be utilized to provide innovative solutions to many of the connectivity issues.

The opportunities to use the air space for community activity is huge.

Ideally this community and recreational activity should be related to making rail travel and freight movement better. It should also assist with blending the rail infrastructure with the local environment and urban design.

The Committee must consider the future directions of rail transport. Clearly major drivers in the change will be cost, efficiency gains, increased speed, increased cargo

weight, passenger comfort, train dimensions and environmental factors such as noise dust and vibration.

Passenger demands will be relatively easy. Car like comfort, greater speed, reduced total journey times, ability to use personal technology and for longer journeys food, refreshments and toilets.

The world wide trend is to increase train patronage. Daily I read of expanding train services and support infrastructure. It is extremely rare to read of rail line removal or downgrading. A number of lines closed in the past have been reopened. The Toronto line should be reopened and operated with "Hunter cars" direct to Newcastle Rail Station.

The challenge will be to find corridor capacity and to use the corridor air space to help meet the passenger needs.

Station design and layout will need to change radically. For examples primitive stations with crappy seating and passenger facilities and only one entry exit would be replaced with fully enclosed air conditioned and well appointed passenger lounges that allow boarding of the train via self opening doors that exactly coincide with the trains doorways. This would provide almost 100% safety.

It should be noted by the Committee that many countries uses screens to seal trains from waiting passengers. The following link will provide details.

[http://en.wikipedia.org/wiki/Platform\\_screen\\_doors](http://en.wikipedia.org/wiki/Platform_screen_doors)

The use of PSD's on rail stations used for coal transport will stop passengers from being showered with coal dust as uncovered coal wagons pass by at speed. As coal freight continues to rise to Newcastle and Port Kembla this issue will require a solution.

The platform lounges would have multi entry exit points. ( to minimise passenger walking distances and help direct passengers to connecting transport eg Taxis or buses.)

The passenger lounges could be like regional shopping centres with shops being double fronted. One to the street and the other to the platform.

At major stations like Parramatta the station lounges would have moving footway exits that deposit travellers at radial location as much as 1 km away. The footway could itself have a fare to help cover the cost.

By way of example Newcastle Station could have two such footways. One to the beach and the other to the Ferry Wharf.

Connectivity and access to the Train Station could be improved in many cases by additional station entry points.

Newcastle Station is an example of a station that has the entry point at one end of the train. Having a drawbridge at platform height that allows connectivity on the western end of the platform and between platforms would be an important use of air space. (see attachment 2) and a very cheap project.

Richmond Station is another example of a one ended station. The air photo is ample proof that there should be a station entry at the Paget St end of the platform. (see attachment 2).

East Maitland Station is also a classic example of high passenger inconvenience and rail corridor underutilisation as all passengers are forced to enter the station from the Northern side (See attachment) despite the major residential and commercial activity of East Maitland.

Without a shadow of doubt the redesign of the rail passenger infrastructure would generate quality use of the airspace that in turn would raise the use of passenger rail transport. The greater the amenity, the greater the enjoyment and the lower the point to point journey time for individual passengers the greater the willingness to pay higher fares.

Freight train movement will also have major demands on corridor air space. Increasing the total numbers of freight trains in the rail corridors will reduce the air space.

The Committee must consider the need to use double stacked trains. (eg a train that can carry two containers one above the other or a coal wagon with much higher sides). The introduction of double stacked trains (although common overseas) has a number of challenges because current air space above trains is insufficient. Tunnel and bridge replacement will be expensive however many can be accommodated as structures are replaced provided this need is now recognised and the air space reserved.

I would like to see the Committee recommend that all future infrastructure and major maintenance programs require that double stacking be provided for. This would include all leases, sales and commercial arrangements.

It is clear that trains of the future will be driverless. This is nearly a reality in West Australia where driverless freight trains will be in operation on a 1500km track by 2014.

More and bigger freight trains, non stop journeys and driverless operation will cause more and more conflict with passenger services. Resolving these conflicts will require a much greater demand on existing rail corridors and rail support infrastructure.

Dedicated passenger lines will be essential in the near future. This will impact on available air space for other purposes.



This freight / passenger conflict will be greatest in the Hunter as the transport of coal will place massive pressure on the corridor.

The demand to move large volumes of coal from the Hunter to Port Kembla will be a real challenge for the corridor and a real issue through Sydney.

Communities along corridors are certainly likely to become very vocal as freight train numbers and size increase and the presence of rail becomes even more intrusive. Corridor air space will be required to provide both formal and informal buffers.

A complicating factor is the HSR proposal that will connect Brisbane with Melbourne via Newcastle and Sydney. Will it create a new corridor? When will it be built? Will the State own the corridor? Will it be a private Government or Joint venture? The early reports hint at some answers however there is little "fine print" available.

The HSR is unlikely to change the passenger needs of existing rail system because it will be a minimal stop system, will not visit Newcastle proper, will not visit the Illawarra and will have very low frequency services. Its passengers are likely to come from airline customers, non travellers and not from existing rail passengers.

It is unlikely that the airlines will allow their customers to make the change without a real fight. For CityRail the HSR is likely to increase their patronage as travellers make the connection to the HSR stations.

If this air space and adjacent land Enquiry is successful then there will be considerable improvements to the current system. These improvements should make the existing fleet operate more efficiently, reduce total costs by generating additional revenue, reducing point to point journey time, allowing the trains to operate more efficiently, faster and more frequently, reducing the clash between freight and passengers, reducing the connectivity issues and allowing the system to operate more safely.

These improvements should increase rail patronage and customer satisfaction. This in turn will differentiate the existing rail system and the HSR.

Clearly there is major potential for the commercial activities of the rail corridor to concentrate on making passenger and freight movement better.

Advertising signage in the train, on the train, in the air space and on the tickets could be a significant source of commercial revenue. All advertising should be by formal agreement with all agreements standardized and by open tender.

The advertising does not need to be tacky and non related to rail. Destination advertising, rail travel packages, suppliers to the rail network and rail promotion are some examples.

As air space is better utilised the connectivity perception whinges will fall.

It should be noted the very long and divisive section between Tuggerah and Gosford has only 8 crossing points and several of these are pedestrian only. The long section between the very major residential areas between Hornsby and Chatswood only has a little over 30 rail crossings and again most of these are for pedestrians the restrictive railway station entrances. There is very little evidence of loud public calls for greater connectivity.

In Newcastle the cries for connectivity started when developers lead by the Hunter Development Corporation and its predecessors commenced removing crossings to suit their development purposes. The road crossing at Wickham Station was removed and the overhead footway at Worth Place (about 1997) was also removed. An overhead footway at Newcastle Station was decommissioned in about 2000.

Attachment 4 shows the remaining section cluttering the airspace when it could be recommissioned or moved to another location.

As train patronage increases the complaints about connectivity will fall.

Full commercial uses of rail corridor and associated air space must be totally related to rail functions, support of passengers and as aids to boost patronage.

### **Development of the rail corridor and adjacent areas**

Frequently many suggest that the rail corridor be used for development of shops, businesses, apartments and a host of other activities.

I believe the options for use of the corridor for developments is far more limited than commonly perceived.

Let me give the Inquire some reasons and examples

Firstly. The train itself takes up considerable space with main lines, passing loops, sidings and a host of operational functions. Larger trains and double stacking will increase this and increase the clearances required.

Secondly. The train needs a considerable quantity of support infrastructure. This includes power cables and their supporting infrastructure, signalling equipment, stations, layovers, train depots and workshops.

Thirdly. Drainage is an important function of the corridor because the rail line structure acts as a bank or drain that channels and or diverts water flows. Considerable land in the corridor is required to redirect water flows, to act as floodways and to act as absorption areas.

Fourthly. The corridor requires open space in order to provide sight distances for the trains operation and control. The open space created by the rail corridor and rail land is a very important part of the urban design. In many cases this open space, view corridors and vegetation has increased the amenity of the community and land values of properties.

Overriding these four key areas is the need for maintenance of the infrastructure and the trains themselves. This access may be for routine activity or for emergency situations.

A train may simply break down or more seriously become derailed and in extreme situations may crash and burn.

Any proposed rail corridor development must not compromise train operation, emergency access or rescue operations. The potential of a major derailment and or fire must rule out many of the sites.

Clearly much of the total corridor is thus ruled out for development. This is particularly so on freight lines and lines with higher speed (over 80kph) passenger trains.

A large proportion of rail corridor land is certainly unviable for development due to terrain, lack of support infrastructure and the availability of other easier to develop sites. Examples include the section from Hawkesbury River to Asquith, the line sections through National Parks and the swamp lands of the Hexham to Kooragang Island corridor.

Rail corridors, the air space and the adjacent land of rail lines that carry freight will have major limitations to using the areas for development purposes due to the noise, vibration, dust and very long lengths of freight trains.

An 80 wagon coal train pulled by 3 diesel electric locomotives up front is a total contrast to a modern passenger suburban train.

Freight trains use large quantities of sand for traction and this adds considerably to dust and grit levels adjacent to rail lines.

Coal trains that stop on rises or curves may need other pusher locomotives to get the train rolling.

Developments that consider tunnelling, building over rail lines or trenching rail lines will need to consider the impacts of diesel fuel (or other future fuels) and a host of other operational issues.

The derailment of a freight train is usually major catastrophe because of the number

of wagons involved, the spillage of bulk goods like coal, the dislodgment of containers and the travelling speed.

The destructive energy of a 10,000 tonne train at 80kph with 17 metre long wagons and upfront locos must not be underestimated.

In New South Wales we have seen the consequences of minor train crash where a passenger train struck a air space structure at relatively low speed. The Granville Bridge disaster.

At Jennings a semitrailer on its side removed the centre pylon of a rail overpass bridge. Again with disastrous consequences.

The air space of the rail system has a large number of bridges and similar structures with a low level of safety.

Prior to September 11 no one would have considered that the Twin Towers could have been totally destroyed by an aircraft crashing into it.

An examination of many serious train crashes will demonstrate that train corridor are simply not wide enough and that trains can leave the corridor. In Italy a two car train became derailed and “went bush”. In Chile a train became derailed and passed through a children’s play ground and into a block of flats. In the US in 1993 a train destroyed a bridge and burst into flames and crashed out of the corridor.

I ask the Committee to seriously consider the consequences of a loaded coal wagon crash under a structure like Chatswood. Would the structure survive if a train wiped out several of the pylons or a 17 metre long wagon stood on end and jabbed a major hole through the buildings upper floor.

Developer driven use of air space, of corridor space and adjacent land must be guided by the following basic principle:-

1. No land sale shall be permitted.
2. The developer's activity must not impinge on the operation of trains and train support activities.
3. The developer's activity must not compromise safety of people, trains or other property.
4. The developer's activity must generate a net return to the government to make the effort to establish the development worthwhile.
5. All leases must require the developer to withdraw from the site within 5 years of a CityRail request.
6. Developers must upon vacating the site must leave the site clear.

## **Conclusion**

Early planners showed vision and foresight to put in place a series of quality rail corridors. These have been added to over recent times to a minor extent. In some cases unfinished projects have been completed like the Ulan line.

Developers and others have looked at all this “locked up” land and drooled about using this for their own purposes.

Land transport has changed several times in recent history. Trains provided transport for the masses before the plane and car took hold.

Trains are now due to new technologies and the environment and rising population densities having a very strong resurgence.

Whilst it is good to examine corridors and seek ways of generating revenue the prime objective of safe and efficient train operation must be the focus and must not be compromised.

Development within the corridor, the air space and the land adjoining must be orientated towards train operation and passenger needs and to drive patronage levels.

Faster train speeds, greater train loads, larger and longer trains and driverless operation are just some of the factors that push safety requirements to new highs.

There is no substitute to having corridors providing “room for error”. Wide corridors, minimal infrastructure and soft speed absorbing off track areas are critical in maximising rail safety.

I do not support the disposal of rail corridors or the use of the corridors, the air space or the adjoining government owned land for any purpose not related to the operation of efficient and safe railways.

If the Committee requires any further information or clarification please feel free to contact me.

If the Committee holds a public hearing I would like to attend and address the committee.

Rick Banyard

28<sup>th</sup> February 2012

## Attachment 1

## Hunter Railway Station Usage Statistics

*compiled by Rick Banyard*

Station	2007 calculated interchanges based on ticket sales	2008 calculated interchanges based on ticket sales	2009 interchanges	2010 interchanges* 10%	2011 interchanges* 12%	2011 average daily interchange
Newcastle	575128	645772	949000	1043900	1169168	3203
Civic	264797	291190	513500	564850	632632	1733
Wickham	92069	109036	106250	116875	130900	359
Hamilton	505838	561200	663000	729300	816816	2238
Waratah	206822	199287	234000	257400	288288	790
Warrabrook	126901	133697	218750	240625	269500	738
Sandgate	0	0	25000	27500	30800	84
Hexham	780	0	10000	11000	12320	34
Tarro	0	0	7500	8250	9240	25
Beresfeild	222355	223696	221000	243100	272272	746
Thornton	213660	211237	206250	226875	254100	696
metford	114730	132202	120625	132688	148610	407
Victoria St	369689	386646	286000	314600	352352	965
East Maitland	25041	24073	37500	41250	46200	127
High Street	0	0	25000	27500	30800	84
Maitland	401495	464261	429000	471900	528528	1448
Telarah	171829	161307	150000	165000	184800	506
Mindaribba	0	0	625	688	770	2
Paterson	0	0	12500	13750	15400	42
Martins						
Creek	0	0	6250	6875	7700	21
Hilldale	0	0	625	688	770	2
Wirragulla	0	0	625	688	770	2
Dungog	31109	34785	31250	34375	38500	105
Lochinvar	0	0	6250	6875	7700	21
Greta	0	0	3750	4125	4620	13
Branxton	0	0	12500	13750	15400	42
Singleton	46657	41106	50000	55000	61600	169
Muswellbroo						
k	45768	47263	56250	61875	69300	190
Aberdeen	0	0	6250	6875	7700	21
Scone	0	0	25000	27500	30800	84
Broadmeado						
w	765775	801541	643500	707850	792792	2172
Adamstown	33223	39042	43750	48125	53900	148

Kotara	23283	26411	25000	27500	30800	84
cardiff	599633	638253	396500	436150	488488	1338
Cockle Creek	12316	14791	12500	13750	15400	42
Teralba	24196	24887	31250	34375	38500	105
Booragul	23923	20977	22500	24750	27720	76
Fassifern	553974	553069	286000	314600	352352	965
	<b>5450988</b>	<b>5785731</b>	<b>5875250</b>	<b>6462775</b>	<b>7238308</b>	<b>19831</b>
	5.5m	5.8m	5.9m	6.5m	7.1m	

#### Notes

blank or 0 indicates statistics not available

a conversion factor of 2.6 for ticket sales was used to produce Hunter totals.

growth rate is between 8% and 13% for Hunter Stations.

interchanges are people movements both on and off

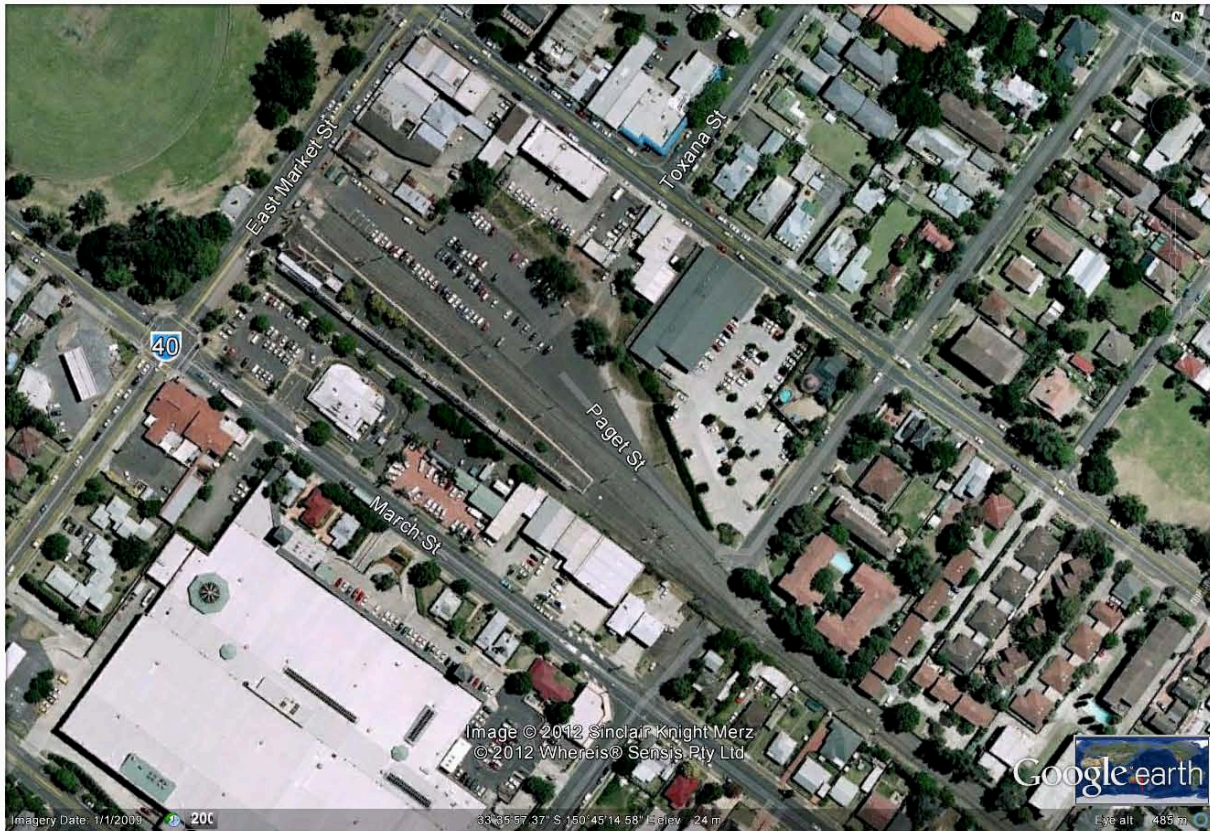
ticket sales by station are unreliable indicators of station use due to ticket sale availability.

Attachment 2



Newcastle Station showing the east end entry and the potential of a west end entry to aid connectivity between the station, ferry wharf foreshore and adjoining land and buildings.





Richmond Station showing the lack of access to the areas of need there by creating considerable passenger disincentive, slower point to point journey times and very poor use of air space.

A shopping / residential complex built over Paget St and the rail line would provide major connectivity improvement for the community and with the rail system.



East Maitland is a major location served by a station with poor station access via a one sided subway with the entrance on the “wrong” side. Park and ride options and passenger comforts are sadly missing. This is a station that gets showered with coal dust from ever increasing coal trains.

### Attachment 3

#### Rail Crossing Options

Many are sick and tired of all those that see the rail line as a weakness.

Many are sick of those that say they want connectivity despite there currently being nine crossings in the Wickham Newcastle section.

The heavy rail line is clearly an undeveloped strength with mighty potential.

Consider making lots of additional rail crossings and make them fun.

The following are some ideas for additional rail crossings between Wickham and Newcastle Stations that could combine with increased rail patronage to give Newcastle Peninsula a rebirth.

A typical conventional rail crossing costs about \$3m. Most of these futuristic crossings could be constructed and operated for far less.

All could be constructed for a fraction of the cost of removal of the line.

Open your mind and vision and consider the following.

#### Extenda Tube

A tube would extend across the line when there is no train. The tube would be constructed very close to the line and would be extended at very rapid speed allowing pedestrians to walk almost immediately with 100% safety.

The principle is similar to the technology commonly used in factories.

#### Bending Beam

A platform would swing across the tracks allowing connectivity when there is no train. When a train comes a door would close on the fixed end and on the end of the beam. The beam would then swing to a position parallel to the tracks. People on the beam can continue to walk on or off the beam.

The principle is similar to the technology commonly used in factories

#### Moving Footway

Moving footways could be constructed to move people considerable distances. Eg 1 From King St near Market Town to Lee Wharf

Eg 2 From the Art Gallery and Library in Laman St to the Museum with exits at the mooted underground car park under Civic Park and at the Civic Theatre.

Eg 3 From the Ferry terminal to Hunter St Mall.

Moving footway technology is common.

### **Novelty Lift**

An external glass lift that raises high on an inverted “V” shaped frame and lowers on the other side of the track. The unit would have two “cars” and would work on demand just like any lift. The view would be part of the fun. An automatic fee could be charged.

Eg From ground level of the new buildings at Steel St

There are numerous examples of external lift technology.

### **Escalator**

An escalator could raise and lower people to an overhead footway.

### **Building to Building high path**

A bridge or series of bridges could be erected to move people at well above street and train level.

This sky boardwalk should be as high as possible and with as many options as possible.

EG1 From the 6<sup>th</sup> floor of the Honeysuckle Uni Campus to the King St Campus and to the Library.

### **Ghost Connection.**

An entertaining walkway that lets people move under the rail line and possibly under Hunter St by exhibiting some of Newcastle’s skeletons, old mine workings and historic “rooms”. An automatic fee could also be charged.

The passage would be via a water proof sealed tube to overcome water table issues.

### **The Splasher**

A fun ride type of crossing that lifts people up into the air and then speeds down to a splash finish on the other side of the line. Would be designed to work two way. An automatic fee could also be charged.

This is a very common entertainment attraction in many parts of the world.

### **The Viewer**

A very high tower built over the rail line with major harbour observation deck at the top and a café, kiosk, and sales area at mid height. A lift from ground level on either side would provide access to both levels and the ability to move from one side of the line to the other. (A similar concept to Telstra Tower in Canberra)

### **The Helicoil**

A fun ride type of crossing that “screw” lifts people up into the air and then descends on the other side of the line. Would be designed to work two way. An automatic fee could also be charged. The lift card would rotate giving people a 720 degree view up and down.

This is a derivative of common entertainment attractions in many parts of the world.

### **The Balance Balls**

This would work like a see saw with a sliding chamber. People would enter the “car” and the car would climb the beam and on reaching the middle would overbalance and descend to the other side. An automatic fee could also be charged

### **Twister**

This would work like an amusement ride. People would enter the “car” and the car would twist and on reaching the middle would reverse twist and descend to the other side. An automatic fee could also be charged

### **Aquarium**

A sealed tube with fish tanks lining the walls.

The effect could be similar to the fish aquarium and the Canberra Zoo An automatic fee could also be charged

### **The Submarine**

The rail line and harbour could combine by having an underwater vessel that could traverse from say Hunter St near Civic station to Stockton Ferry Wharf to complement the surface Ferry service. An automatic fee could also be charged

This unit could operate 24 hours per day providing connectivity for the 4500 people at Stockton with the 3000 residents of Newcastle, Newcastle East and Newcastle West.

### **The running tube**

This shared pathway would be a reverse moving footway that would require travellers to run at a speed greater than the reverse movement of the footway thus allowing people to exercise and get fit whilst crossing.

### **The veledrome**

A rotating dish mounted above the rail line would rotate. Cyclists would cycle up the on ramp and lap the dish several times before selecting an exit ramp.

#### Attachment 4

Connectivity a myth!

What on earth is connectivity!

- Is it phoning a friend?
- Getting the car from one side of the river to the road on the other side?
- Is it getting a bus to the airport on time?
- Is it getting across a rail line when there is no reason?
- Is it a sight corridor?
- Or is it just a buzz word when people cannot think of a valid answer!



These two crossings near Newcastle Station are about 10 meters apart. One not only spans the rail line but two major roadways.

Compare this

There are now nine crossings between Stewart Ave and Newcastle Station.

There are now ten crossing between Stewart Ave and Hexham.

So where is the problem?

If we want to cross the line let's just do it NOW!

Options include:-

- Street Trains

- <http://www.rail-videos.net/video/view.php?id=8471>
- <http://www.rail-videos.net/video/view.php?id=8435>

- Relocation of unutilised structures



Put this



Here

- Making new Crossings.





## Inquiry into the utilisation of rail corridors

### TERMS OF REFERENCE

That the Legislative Assembly Committee on Transport and Infrastructure inquire into and report on the utilisation of air space above, and the land adjacent to, the rail corridor in the Greater Metropolitan Area of Sydney, including the Hunter and the Illawarra.

Matters may include, but are not limited to, how rail corridors might contribute to:

- providing opportunities for mixed use property development;
- generating income for funding future infrastructure projects;
- facilitating sustainable urban renewal and development;
- facilitation of transit oriented development schemes around railway stations;
- connectivity of communities either side of railway lines.

Other areas of inquiry will include:

- the current planning and policy framework;
- regulatory and policy barriers to implementing rail corridor projects;
- issues relating to the financing and funding of such projects;
- methods of assessing the compatibility of projects with the local community;
- examples of best practice from other jurisdictions.

### COMMITTEE MEMBERSHIP

<b>Mr Charles Casuscelli MP</b>	Liberal Party	<i>(Chair)</i>
<b>Mr Tim Owen MP</b>	Liberal Party	<i>(Deputy Chair)</i>
<b>Ms Tania Mihailuk MP</b>	Australian Labor Party	
<b>Mr Greg Piper MP</b>	Independent	
<b>Mr Paul Toole MP</b>	The Nationals	

## Attachment 6

### Transport Plan for the Hunter and Lower Hunter

#### **(NOTE extracts only) full document available on request.**

This document was prepared by Rick Banyard as a submission to the Hunter Independent Public Transport Initiative in line with its discussion documents in the Newcastle Herald and information distributed at the three forums.

This document very briefly comments on key issues and makes 20 key recommendations. The recommendations are supported by statements of logic.

The recommendations are based on maximising the benefits to the Hunter at the lowest cost to the taxpayer.

Over and above the recommendations are three big ticket items that must be proceeded with as a matter of haste. They are in priority order;-

- Freight rail line from Carrington along the Port edge via Steel River to Sandgate.
- The construction of the Glendale Interchange and associated road works.
- A freight rail bypass on a route with low impact on residents and extending as far south as can be achieved.

The lack of sound reasoning and quality supporting facts combined with the huge level of funding required must eliminate the concept of cutting the heavy rail line at Wickham. There is even less valid justification for removing the heavy rail and replacing it with light rail.

Those that persist with the concept of closing the line must explain which of the very important other transport projects in the Hunter region they wish to forgo.

By necessity all issues raised are done so in brief, however if required all points can be expanded and additional statements of fact can be provided to support the proposals and points raised.

This document could also be supported by a presentation.

The recommendations in brief are:-

- 1. Public transport planning and operation must recognise the four primary needs.**
- 2. Private motor vehicles be recognised and provided for as the major form of transport in the Hunter and Lower Hunter for the public.**

- 3. The heavy rail line to Newcastle Station is the most important public transport asset of the Hunter Valley**
- 4. A bridge over the mouth of Newcastle Harbour is the most important item of vital infrastructure for the Lower Hunter.**
- 5. All future major residential subdivision and commercial development to be established based on rapid transport to key nearby centres.**
- 6. Public transport be defined as all forms of transport activity within the Hunter Region which is operated for hire or reward.**
- 7. The entire Lower Hunter route bus fleet should be replace with mini buses.**
- 8. Every vehicular level crossing in the Lower Hunter Region should be replaced.**
- 9. Disabled provision should be treated as a special service.**
- 10. Public transport must be cost effective to the end user and to the taxpayers.**
- 11. The new directions for public transport must incorporate an open minded attitude of transport administrators, the community and the travelling public.**
- 12. Public transport must work and must meet predetermined performance standards and benchmarks.**
- 13. No University Campus be established within the Newcastle Peninsula.**
- 14. Cost recovery for Public Transport should involve stronger user pays policies.**

- 15. Transport provision for the Hunter should involve all modes available.**
- 16. Establish appropriate provisions for young people.**
- 17. School transport be the responsibility of the school.**
- 18. Air Services be increased and receive better connectivity.**
- 19. Tourism Trails**
- 20. Sport and Event Travel to include public transport.**

The text of the document examined each of the key recommendations and provide details.

**Public transport planning and operation must recognise the four primary needs.**

Public transport in the Hunter and Lower Hunter has four distinct activities and it is imperative that these be fully recognised and understood.

- To move passengers and freight within the Lower Hunter
- To move passengers and freight between the Lower Hunter and other parts of the Hunter Valley
- To move passengers and freight to and from areas beyond the Lower Hunter and Hunter.
- To act as a corridor for the movement of freight and passengers from outside the Lower Hunter to another location also outside the Lower Hunter.

The principle freight movements in or through the Lower Hunter are bulk products (eg coal, grain, bauxite, woodchips, logs, fuel, cement and sand) containers and general freight. Most coal and grain on land is by rail with the other products are mostly by road. Sea is a major export and import mode.

The five principle passenger movements are

- personal transport,
- journeys to work,
- school transport,
- pleasure
- tourism.

The potential for tourism is, except for air travel, almost untapped. For example the heavy rail into Newcastle Station has 169,000 seats per week (at a maximum fare of \$7.80) with almost all seats commencing their journeys outside the Lower Hunter Region.

#### Cost

There is very little cost involved.

Some minor educational and briefing costs is all that is necessary.

The reward is a transport system that is efficient, planned, in harmony and maximises benefits to all.

Following are some of the 20 recommendations made in the document that would significantly lift transport in the Hunter Valley, stimulate economic activity and greatly improve the lifestyle.

Wasted time is the hidden cost of poor transport.

## **Private motor vehicles be recognised and provided for as the major form of transport in the Hunter and Lower Hunter for the public.**

Private motor vehicles in the Hunter Region currently provide greater than 97% of all journeys for all reasons.

Motor vehicles operate at a profit as the income raised is less than the funds expended. As can be seen from the table and figure at the end of this section the revenue in 2006 07 was \$16.2b and the expenditure only \$11.37b.

Moving people from cars onto heavily taxpayer subsidised public transport will have a major impact on our economy.

Public motor vehicles provide about 25m journeys in the Hunter mostly via bus with these vehicles largely sharing the same infrastructure used by all other vehicles.

Bus lanes, bus stops and priority traffic lights, taxi ranks and taxi concessions etc may provide some benefits to their passengers however it must be recognised that such measures reduce resources available and slow journey times to the majority of other roadway users.

The removal of all buses from the roadways particularly in peak times would reduce much bus induced congestion. The claim that bus passengers would add to the congestion if buses were removed cannot be substantiated. Bus passengers tend to have low car ownership or low access to cars. Buses only average 1.4 passengers per Km travelled by bus. For these fundamental reasons bus passengers could not contribute significantly to congestion if there was no bus.

By contrast if people were induced to travel by bus (examples include (a) by cutting the rail (b) by locating employment and education remotely to residential locations (c) by subsidised fares.

The geographic characteristics and demographics of the Hunter Region make the area unique and very difficult to compare with other localities. Flood plains, mountain ranges, mine sites, mine subsidence, national parks, rivers and rail freight corridors force our population, our residential areas and work areas to be sprawled, spread out and often remote.

The region's population and employment have unusual characteristics. Living on a large mine site, working in a mining equipment repair facility and life as a power station operator virtually force the community to be locked into providing their own personal transport. Even people with "normal jobs" in the Hunter are "on the road" for much of their working day. Truck drivers, consultants and trades people all rely on the roads and there is no opportunity of providing public transport to meet the needs of these people.

For the efficiency of the region, for the economy of the region and for the commercial viability of the region vehicle transport must be king and remain that way forever with public transport taking second place.

## Cost

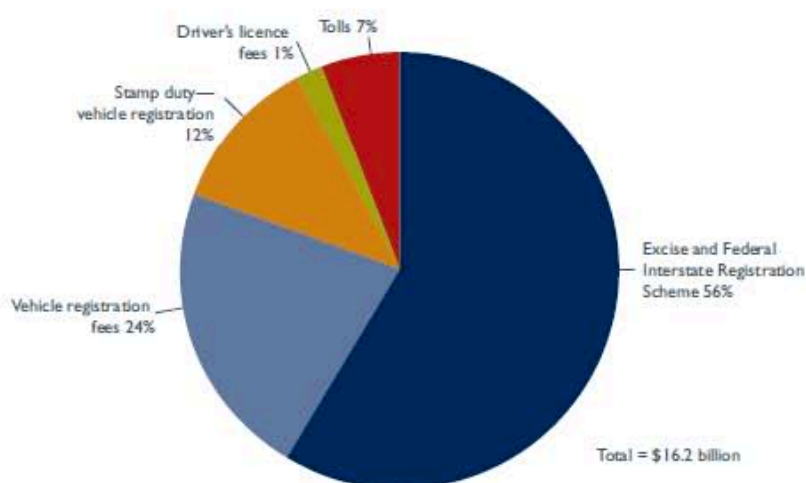
There is no cost or funding required. It is simply a policy decision.

There is a revenue gain to the government from more roads and road use.

**Table 1 Funding of road-related expenditure 2000–01 to 2007–08 (current prices)**

Source	2000–01	2001–02	2002–03	2003–04 (\$ millions)	2004–05	2005–06	2006–07	2007–08
Australian Government	1 458.5	1 821.5	1 720.1	1 818.2	2 101.3	4 251.7	2 772.1	2 723.8
State government	3 713.7	3 500.1	3 583.2	3 599.2	3 797.6	2 434.9	5 592.1	7 335.4
Local government	2 731.8	2 730.1	2 730.4	2 799.9	2 619.3	2 019.6	2 508.0	3 127.3
Private sector	1 08.0	1 58.0	421.0	314.0	396.0	563.0	499.0	740.0
<b>Total</b>	<b>8 012.0</b>	<b>8 209.7</b>	<b>8 454.7</b>	<b>8 531.3</b>	<b>8 914.3</b>	<b>9 269.2</b>	<b>11 371.2</b>	<b>13 926.5</b>

**Figure 3 Distribution of selected motor vehicle taxes and charges 2006–07 (per cent)**



Sources: ABS (2007); ABS (2009d); ASX (2009); ATO (2009); Commonwealth of Australia (2007); Department of Infrastructure, Transport, Regional Development and Local Government (2009); Road Transport Authority of NSW Annual Report (2007); state and territory transport departments annual reports (2007); Queensland Department of Transport (personal communication April 2009).

## The profit from Roads

Revenue	\$16.2b
Expenditure	\$11.4b
Profit to the Government	\$4.8b

## **The heavy rail line to Newcastle Station is the most important public transport asset of the Hunter Valley**

The debate about the rail line between Newcastle Station and Wickham has been long and ongoing.

Every decision made to date has favoured the retention of the line for the heavy rail to Newcastle Station.

The current debate rages with very few facts being tabled that provide a convincing fact based case to support the proposal to cut the line.

The heavy rail line from Central Station, the Upper Hunter and many other parts of Australia to Newcastle Station provides connection with Newcastle of about 5m people with about a 3 hour rail journey. This is of critical importance to the future of Newcastle for tourism and to connect Newcastle with other public transport systems in places like the Central Coast and Sydney.

The heavy rail currently comes in for criticism for three key reasons

- Connectivity between Hunter St and the Harbour.
- Low patronage
- Rail crossing delays

The issues of rail crossings and connectivity are readily fixed with low cost works or in conjunction with other works / developments. See attachment 1 and attachment 2 to this section.

Some of the solutions can be profit making ventures and tourism attractions.

The low patronage has two key reasons.

Firstly the service is primarily used as a commuter service for journeys to work. Given the economic decline of the CBD as a place of work trips generated are small and for the foreseeable future will not recover.

By contrast the tourism potential of the area is huge and the rail with its very low cost fares (max \$7.80 and Funday Sunday fares of only \$2.50) is a major transport option.

The lack of available reliable patronage statistics is a major concern.

As more major events are held on the foreshore the need for the train is increased. Recent events have drawn trains loads of 1500 people.

Secondly the service is not marketed.

The Rail crossing delays are a figment of many people's imagination. Recent commentaries and traffic studies has largely dispelled this furphy. Clearly the key reason to impede the traffic flow in Stewart Ave is the three sets of traffic lights.



## Cost

The cost of providing improved crossings is of little net cost because is offset by the income generating potential of the crossings, by the commercial gains of linking buildings, by the build above the rail line proceeds and by the huge revenue from the extra rail passengers as a result of the tourism marketing.

The removal of the rail heavy rail line together with corridor restoration works will cost in the order of \$750m and produce absolutely nothing. The real question is which \$750m transport will not be funded if money is expended on removing the line.

If the line is removed the next question is how will the replacement travel mode be determined and funded.

A major cost issue will be Stewart Ave. The low impact rail crossing will become a major issue and will require large sums of money to overcome. Even without an alternate transport the flow of people over the light controlled pedestrian crossing will cause constant stopping of traffic with major flow on effects.

## **A bridge over the mouth of Newcastle Harbour is the most important item of vital infrastructure for the Lower Hunter.**

The facts are everyone wants to live on the coast and generally the closer to the ocean the greater the value of the land for residential purposes and for recreational purposes.

Bridges that connect landmasses are common place in a large number of coastal locations and in every case the benefits are major and far reaching.

A bridge over Newcastle harbour is feasible, practical and affordable.

A bridge would have major aesthetic and tourism characteristics however it would open up the Lower Hunter Coast to a wide range of public transport options and associated residential development. See attachment 3 at the end of this section.

The most obvious opportunity is a very light rail from Swansea to Nelsons Bay via the Newcastle Airport. This route would connect with the heavy rail at Newcastle Station. Where possible the route would follow the shore line and would have stops at all the beaches.

It is suggested that the bridge would have a deck height of 70m and be a single span suspension.

The cost of the bridge would be low if the bridge traffic was restricted to two lanes of light vehicles, a shared pathway and single track very light rail.

## Cost

A harbour bridge would have a very high cost benefit ratio.

## **All future major residential subdivision and commercial development to be established based on rapid transport to key nearby centres.**

The future plans for the lower Hunter is based on many large scale developments building 500 plus homes on Greenfield sites and large scale infill's of 100 plus households.

Roadways, potable water, grey water, sewer, drainage, electricity, gas, waste disposal and communications are all considered normal and essential provisions provided to each and every household.

From July 2011 (?) it will be a statutory requirement for all households in new estates and developments to be provided with high speed internet via fibre optic cables.

It is therefore logical that all large developments be required to incorporate a public transport system that provides efficient, rapid and frequent connection to a nearby major centre.

The minimum requirement should be a system that provides a journey time from the door of the household to the major centre within a time frame equal to the same journey by car plus 50%.

It would be a requirement of the nearby major centre to be serviced by network public transport.

The transport system could include moving footways, PRT's, PT's like (Segway PT, "golf carts" and mobility scooters) monorails or mini buses.

Fundamental to the provision would the design and layout of the area.

New urban design concepts will be needed to allow the transport to be the first item on the site plan.

One way may be to reinvent the rear lanes and establish them as service and public transport corridors for the location.

The Lower Hunter with its flood plains, swamps and low laying areas unsuitable for development could be the subject of projects like Amwaj where Boskalis and others have created floating residential and commercial areas. On a smaller scale this concept could be used to create transport corridors over otherwise unusable topography. [www.designbuild-network.com/projects/amwaj/](http://www.designbuild-network.com/projects/amwaj/)

### **Cost**

There is little cost to this proposal as it is simply a policy decision.

There may be some costs to the developer however the product will attract a real premium from the purchasers if marketed correctly.

## **Public transport in the Hunter be defined as all forms of transport activity within the Hunter Region which is operated for hire or reward.**

Transport is critical to the Hunter Valley and this involves major capital investment an infrastructure funds the majority of which comes from the government.

Public transport as defined should include all infrastructure and support activities that facilitate the efficient operation of public transport.

Freight movement by all modes should be considered as public transport.

Public transport planning and operation must recognise the four primary needs.

Public transport solutions of the future must adopt new technology and innovation.

The key issue in the definition is “hire or reward”. That would set it apart from pleasure travel or freight movement. For example the movement of groceries to a local shop would be public transport however the journey from the shop to home would not.

The mode of transport used is a matter of logistics based partly on financial consideration.

Clearly freight movement is just as important as the movement of people.

## **The entire Lower Hunter route bus fleet should be replace with mini buses.**

Newcastle Buses fleet operate on a patronage level of less than one passenger per kilometre travelled. Most other Hunter Valley buses are similar.

Dedicated school buses are typically charter services and are not route services.

The recently announced replacement of old buses in the Newcastle fleet will cost \$22m for 50 buses. That is a cost of \$440,000 each or \$33,000 per year per bus over a life of 15 years.

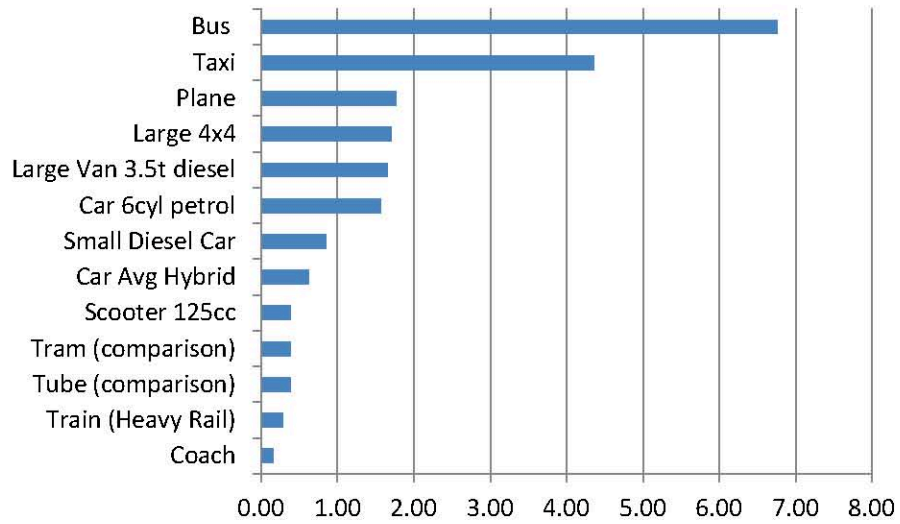
That’s about 50 cents each time a passenger steps into a bus just to cover the capital cost without taking into account the cost of funds used.

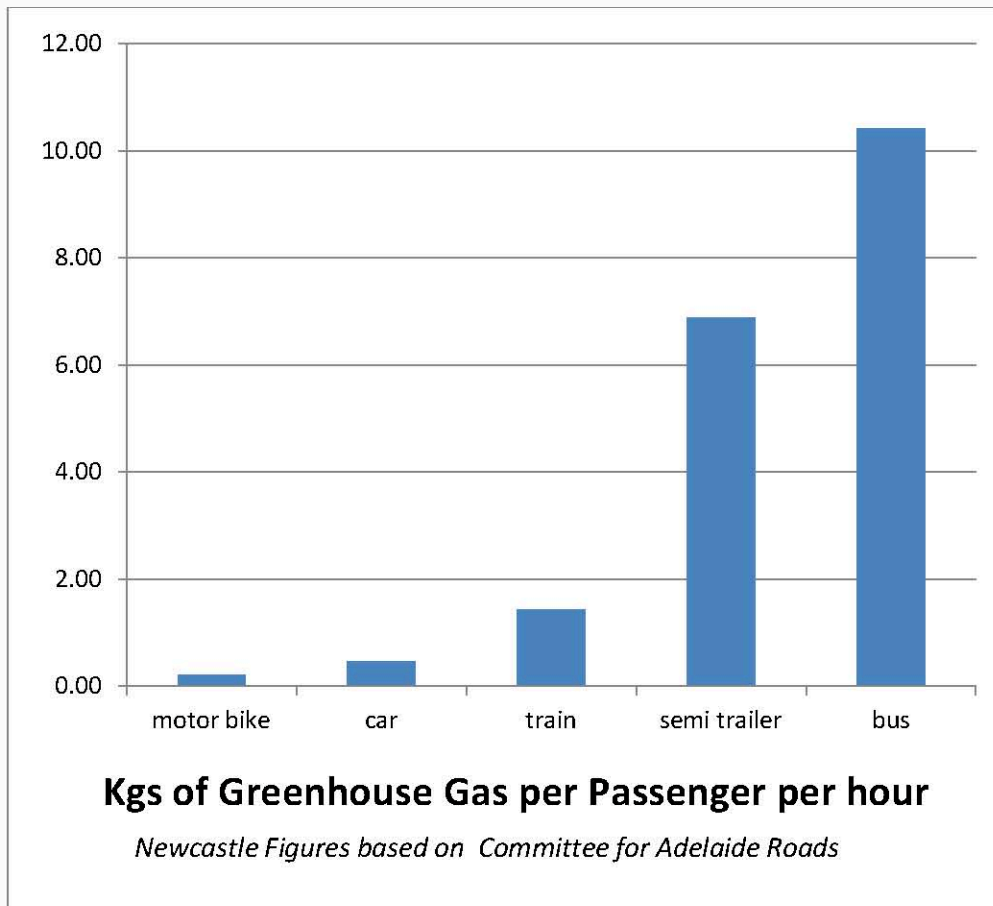
To this is added the operational and maintenance costs.

The operation of a bus fleet on this basis can no longer be tolerated.

The operation of “stretch limos” with 45 empty seats is a disaster and very unsound environmentally.

## Newcastle Carbon Footprint Tonnes of per 5000 kms travel per person





The answer is simple.

Replace the bus fleet with buses of the correct size.

Minibuses of about 12 seat capacity will provide car like comfort, have a very much smaller capital and operational cost and be far better for the environment and still have an average of 10.5 empty seats!

The real benefit of buses like the Toyota Hiace Commuter is that the cost of operation and maintenance is a fraction of the stretch limos. With the cost of one large bus at about \$450,000 each it is possible to buy about 7 Hiace's for the same capital.

It is estimated that if 300 plus mini buses replaced the entire Newcastle Buses fleet they could be funded and operated for the same cost of the existing 165 "stretch limos".

The 300 buses will give public transport a major boost as double the kms available to travel will deliver higher frequencies and more locations serviced.

It should be noted that the existing Newcastle route only aim to provide people a bus service within 800 metres of their location. That also applies to disabled passengers.

Load limits on roads, narrow streets and confined areas etc also prevents the 17 tonne "stretch limos" from meeting the commuter's needs and seriously slows down the travel times.

An additional cost of the “stretch limos” is the huge bus stop spaces required. This consumes important parking space and reduces revenue generation options.

Bus stops for small vehicles operating at greater frequency can be very much smaller and at a very much lower cost.

### **Cost**

This is a cost saving measure that would allow double the passenger kms for less than the existing fleet costs.

This could be implemented within 6 months without any funding.

## **Every vehicular level crossing in the Lower Hunter Region should be replaced.**

Level crossings are very disruptive to the flow of vehicle traffic.

Modern engineering and design allows for a host of alternate method of crossing rail lines.

In all locations where light rail is introduced the crossings should also not impede the flow of traffic.

Light rail should not be introduced into existing road corridors.

Where new road corridors are built and the design provision allows for light rail (eg over the Newcastle Harbour Bridge) then this is acceptable.

Whilst the removal of vehicular crossings in the Lower Hunter is specified it is also recognised that there are some key rail crossing in the Hunter that need attention. Certainly the New England Highway crossing at Scone is a very high priority.

### **Cost**

There is a cost to replace level crossings.

There is also a major saving especially to roadway users and pedestrians.

Deaths and injuries are expensive.

The loss of time and productivity is recoverable with the removal of crossings. Adamstown and Clyde St are key examples.

## **Public transport must be cost effective to the end user and to the taxpayers.**

All public transport operates at a significant cost to all levels of government.

By contrast transport for the public (eg planes) or private transport (eg cars) is largely funded by the user from taxes, excise duties, fines, user charges and alike.

Freight movement is funded by the users.

The maximum fares for taxis, buses, trains and ferries in the Hunter are set by IPART.

IPART has a major responsibility as part of its charter to ensure that fares set consider the cost to the government.

In the case of the Hunter the fares set by IPART may well be inappropriate as they are based on State wide and Sydney metropolitan considerations.

Despite IPART's requirement operators can set lower fares.

The introduction of the Myzone fares is certainly likely to be a hot topic at the next pricing hearings as fare are now well below the fares approved by IPART following strong representations from the operators that fare increases were necessary.

It is my opinion that the existing discount fare options will be dropped in the near future resulting in fare increase of about 50%.

Strong representation from the Hunter has influenced IPART's recent decisions.

In the Hunter Local Government spends considerable funding on bus stops and other support infrastructure. Given the very low usage levels and the high maintenance costs it is very questionable that this funding is a wise use of ratepayers funding.

## **The new directions for public transport must incorporate an open minded attitude of transport administrators, the community and the travelling public.**

The views on public transport are very polarised and are largely based on what has worked in the past, not what is needed for the future.

Public transport has lost the vision of early settlement. Railways were established by visionaries who realised that the rail line was the key to development and population spread. The current attitude is to react to demand.

It should be noted that Newcastle only got going once the rail line connected the large population centre of Maitland (and its produce) to the very much smaller Newcastle.

Private motor vehicles must be provided for as part of the "Public Transport" mix because private vehicles meet almost of the requirements of commuters and travellers to a very high standard. They meet the criteria of frequency, directness, needs, cost effectiveness and the needs of the less abled.

The decline of public transport is directly related to the improvement in (and availability of) private transport

Motor bikes, pedal cycles, electric bikes PT's and mobility scooters etc are all forms of private vehicles and can not be considered as Public Transport to any greater extent than the motor car.

Suggestions of peak oil, pollution and most other commonly espoused anti car comments are totally unfounded and irrelevant as the car and its fuel is rapidly changing and will continue to do so.

The motor car is about to undergo the greatest change in transport since the horse and carriage became the car by "mechanics" placing an internal combustion engine in a cart and making the horse and farrier obsolete.

The "mechanic" is now being replaced by the "electrician" who will power, guide and manage the car with electricity and electronics.

The cars of the next few years will allow the "car" or its derivatives to take an even higher proportion of our normal everyday transport needs.

The only real need for public transport in the near future will be for journeys greater than about 75kms.

If you do not believe this you are absolutely dreaming and in serious need of a few hours of Google searching. Start with "electric cars", "compressed air cars", "hydrogen cars", "car guidance systems" and "electronic car controls".

## **Public transport must work and must meet predetermined performance standards and benchmarks.**

Public transport in the Hunter is characterised by an absence of visible operational performance statistics.

Examples include:-

No quarterly figures for fare free zone travel.

There is no accurate method of counting fare free zone travel.

There is no accurate railways travel statistics because there is no count of travellers.

There are no current accurate statistics of either bus or train travel to Newcastle Station.

Route buses operating under time based fares have no journey length records.

There are no statistics to show bus stop use, bus stop shelter use (and if it in fact used for transport purposes) or the cost of providing individual bus stops.

The above are only a few examples. The statistics collected are crude estimates and are mostly found in were outdated documents including annual reports.

The RTA by contrast has significant vehicle movement and operation statistics.



Without accurate statistics and performance data how can the public transport system be managed, adjusted and justified?

Special promotions and Event trains must involve the collection of accurate data. Failure to do so provides no indication of the effectiveness of the provision, the number of patrons transported or the value of this service to the community.

It should also be noted that for the Fat As Butter concert at the foreshore in late 2010 large numbers of patrons used special trains to the point where City Rail did not collect fares and there was no statistics for the passenger count. From a planning view point Newcastle Station will now on paper be far less utilised than is the true case. The inability to collect fares also withdraws funding from public transport.

By contrast motor vehicle use is relatively well recorded and documented.

### Cost

A key management principle is “if you cannot measure it you cannot manage it”

The cost of collecting and reporting accurate up to date statistics will have significant financial benefits.

## **Cost recovery for Public Transport should involve stronger user pays policies**

Public transport has to be paid for by someone. It is not free.

The current fare schedules are discriminatory being very cheap for people of low income and or elderly and relatively dear for others.

The first group use public transport and make up a major proportion of the Hunter travellers.

The second group tend to have cars, have families and commute to work using private transport.

To increase public transport use the second group needs to have a good financial advantage, a high level of satisfaction, high reliability and a low level of inconvenience.

Increasing public transport use by bus has massive capacity as the average Newcastle State Transit bus has 43 empty seats plus standing space available for each kilometre travelled.

Those empty seats are a major revenue stream that the operators of the buses should be obliged to exploit. Filling those seats will give extra revenue to help fund more bus transport.

Fare box revenue finds its way back into the coffers of the Ministry of Transport and the Ministry funds the operation of the buses with the Government providing the capital for new buses.

To increase the use of bus transport in the Hunter the funding model needs changing.

The new funding model must provide an incentive to bus operators to increase patronage and offer better services. Operators should be allowed to keep all fare box revenue. The value of route contracts should also be reduced in favour of greater fare box revenue.

The majority of bus services in the Hunter Valley are monopolies based on negotiated contracts for routes. This is highly inefficient and does not allow competitive forces to deliver the best services.

Contracts should be awarded on a competitive total provision basis based on designated areas and specific routes. It should be the operator's duty to supply the bus, operate the service and provide all bus stops. The contract should be transferable.

### Cost

A rise in bus fares to provide uniform fares to all passengers will make the bus service better for all. With higher bus occupancy the fare structure could be lower. The revised bus contracts will lower bus operation costs on a per passenger basis. The use of appropriate size buses will lower operation costs and substantially reduce the environmental harm. Fare increases to pensioners etc could be offset by other government allowances or by the use of dipped passes.

## **Conclusion**

Public passenger transport accounts for a very minor volume of all journeys. Probably about 2%.

Increasing public transport 10 fold over the next 20 years will give 20% however will still result in more than 80% (plus the factor for 20 years growth) of transport by private means. Cars will remain as the major mode of transport.

With freight transport coal will be king and the demand of coal transport to the Port of Newcastle will place massive pressures on existing transport infrastructure, transport funding and operational resources.

The conflicts of highly profitable coal transport with the finicky negative revenue passenger transport could well instigate the withdrawal of existing passenger services and certainly make the provision of extra services very difficult.

Taxpayers will probably have a lower ability to fund public transport in the future.

Given the shortage of funding the mooted closure of the heavy rail from Newcastle to Wickham must make the project one of the lowest expenditure

priorities. The alternative must be to market the train service to Newcastle Station and fill as many of the 169,000 seats as possible.

New and additional rail services and infrastructure will have to have a high cost benefit ratio and be largely funded by the side benefits. Eg the Glendale rail interchange will be a result of retail pressure and the need for road links to Cardiff.

The construction of infrastructure to support bus services such as elaborate bus stops and terminals is at best very questionable given the very low use of bus services and need to review routes and operational fundamentals.

Cars will undergo a revolution not seen since an internal combustion engine was fitted to a four wheel cart.

Electronic vehicle management and guidance systems instigate major changes to the way roads are used and the capacity of roadways.

Changes to housing, employment and social activities will be extensive and driven by technology. This in turn will impact on housing.

Residential and commercial expansion in the region will include several new very large subdivisions. This will provide the opportunity to develop suburbs based on public transport and advanced communications.

Major infrastructure items such as a Newcastle Harbour Bridge will have national significance and therefore qualify for Federal funding. In turn project like this will be the catalyst for amazing growth, development and economic gain.

New technology will open up a plethora of new transport options. PRT's and PT will offer a new dimension.

Electricity, compressed air and hydrogen could well be the new environmentally friendly energy sources thus overcoming the peak oil theories and carbon issues.

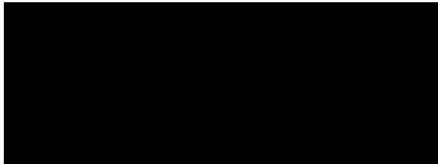
Electrics and electronics will result in the biggest change in transport since the internal combustion engine was placed in a horse drawn carriage. This change has started and within ten years will have a very major impact.

The future will be very exciting and vastly different. Planes will fly, heavy rail will be the mass transit for journeys of 50 to 150 kms and cars will remain king. Short trips of up to about 5 kms will be by PT's. Walking and the pushy will be for exercise and social activity only.

Finally the large geographic area, the low population density and the spread nature of employment locations must not be ignored. Planning our public transport would be served far better by modelling on large country towns rather than comparing our systems and needs with large cities.

I trust the points raised will stimulate discussion, quality thinking and better transport for the future.

Rick Banyard



January 24 2011.