No 28

INQUIRY INTO THE UTILISATION OF RAIL CORRIDORS

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Inquiry into the Utilisation of Rail Corridors

Prepared by Save Our Rail NSW Inc. - 29 February 2012

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Inquiry into utilisation of rail corridors, air space above and land adjacent to rail corridors

This submission is lodged in accordance with Terms of Reference.

Save Our Rail NSW Inc (SOR) is a Hunter based community organisation concerned to maintain and improve public transport and to increasing its use in preference to private cars. The Newcastle Rail Line is used as a detailed case study with references to the Hunter Valley transport needs. However the principles on which it is based apply throughout NSW.

Any proposed use of rail corridors, whether air space above or adjacent land, needs to consider the primary function, which is to be available for train transport - passenger and freight.

DEFINITIONS

- 1. A definition of "air space" with regard to proximity to rail lines should include:
 - a) Useable space directly above rail corridors, which could be used for a variety of purposes, but which must be used with no impediment to the movement of trains.
 - b) Space under an existing rail corridor, which could be used in various ways trench or tunnel.
 - c) Elevation of the line, which would provide space between the ground and the elevated section of line.

Use of air space and any adjacent development needs to be appropriate to the type of situation or location and needs to take into account factors of noise and vibration intrinsic to rail lines, which may limit other uses of space.

- 2. Rail corridor refers to rail transport corridor whether publicly or privately owned.
- 3. Adjacent Land means any land directly adjoining a rail corridor, whether publicly or privately owned and includes roads, buildings, car parking spaces, parks and environmental lands.

There are four main categories of rail stations:

i. Destination Stations

The CBD needs to be the destination, with employment and recreational attractions clustered closely around it. The development here needs to be high density with a 200m ped shed (walking distance in any direction).

A destination station will often also be the terminus of the rail line.

ii. Origin Stations

Suburban stations need to be origin stations, from which commuters can easily catch transport to the required destination.

Such a station should aim to attract commuters to use the train for the main part of their journey. The space adjacent could well be used for a Park 'n Ride station, which would incorporate various supplementary functions of the sort often required by commuters. They could include child care centres, car service facilities – automotive repairs or valet type services, a dry cleaning outlet, kiosks for light refreshment or newspapers.

iii. Interchange Stations

Interchange stations should be developed only if needed, to link services.

This is often a connection of rail to rail, and should use space to provide facilities for longer distance passengers. These would include facilities to occupy passengers who need to wait for a connection, such as provision of food and drinks, toilets, family room, magazine and newspaper kiosk and a space for smokers.

iv. Town Centre Stations

Town Centre stations, which would be situated at a central town of a regional area, located at the junction of various forms of transport. Town Centre stations would have a dual purpose as destination and origin stations.

There could be a need for air space here to be used for the provision of a bus station either above or under the rail station.

Park 'n Ride stations at Town Centres need to be provided for passenger use. The design and implementation of the Park 'n Ride facility needs to be such that it cannot be filled by cars coming into town for other purposes, e.g. the nearby shops, but needs to be reserved for the train connection.

There should be easy pedestrian access between the parking and the rail station.

S.O.R. BACKGROUND, POSITIONAL STATEMENTS AND PROPOSALS

Primary use of rail corridors must be for train transport, both passenger and freight.

It must be accepted that the above statement indicates that lines should not be cut in order to use the corridor for any other purpose and that the Government in the present circumstance needs to put in place as a policy:

- Retention for train transport, all rail lines currently in use.
- The resumption and restoration for train transport, as far as possible, lines and rail corridors currently unused.
- Identification and reservation of potential rail corridors in new development areas.

The current process, in which a case has to be argued through Parliament, before the closure of a rail line would be considered, needs to be retained. This process to some extent prevents opportunistic closures for political advantage.

The reasons for these priority items are that rail is seen as the future in terms of efficient mass transit, and that TOD developments are vital for future success of cities, and they are not possible without an operating mass transit corridor.

In the foreword of Tim Fischer's book *Trains Unlimited in the 21st Century*, Lord Richard Faulkner said,

"... not only had railways a future, they were by far the most comfortable, most environmentally friendly and often the fastest form of transport. The argument for trains has now largely been won. It is almost inconceivable that a major advanced nation would embark on a program of railway closures and cuts of the sort carried out in Britain in the 60's and 70's."

Tim Fischer, former Deputy Prime Minister of Australia, said in his book:

"...where they 'got rail' the big cities have enjoyed huge advantages and better quality of life, compared with the 'all motor car' cities."

Rail is a vital component in the provision of transport for any property development, currently having increased significance with oil price rises and with greater awareness of environmental factors. Save Our Rail is aware that these issues would have relevance to the achievement of current targets set by the NSW Government, of growing public transport patronage and increasing the share of commuter trips to and from Newcastle CBD by 20% by 2016.

TERMS OF REFERENCE

1. Providing opportunities for mixed use property development

The use of rail air space can be an opportunity to improve customer experience with transport services by providing appropriate infrastructure for better access to trains and across rail lines and the provision of amenities for commuters.

Government policy for urban design should reflect community needs in this regard.

Save Our rail has consistently supported Transit Oriented Development (TOD) as advocated by Prof. Peter Newman, Murdoch University, who described it as follows:

By creating certainty for investment TOD is building closely around rail stations where it is possible to add a significant premium on land values.

He cited the case of a Sydney developer who invested in Perth in the form of a TOD and returned a profit of \$90 million. Newman stated such investment "will guarantee higher profits within a kilometre of any station." (Ref: Newman P. *TRAINS BUSES AND CARS: Planning for a sustainable future in Australian Cities*) Newcastle Herald 20/04/05)

Other studies, worldwide, have indicated increased land values through proximity to rail. In a report to HDC (Then Honeysuckle Development Corporation) Dupont Fagan Valuers quoted from the Toronto (Canada) Real Estate Board's comment on the establishment of a new mass transit railway system in that city, as follows:

If an urban transit system never earned an operating profit it would still pay for itself a thousand times over through its beneficial impact on real estate values and increased assessments.

Save Our Rail has previously prepared proposals which would encourage TOD in inner Newcastle. In SOR documents *Sustainable Transport in an Urban Environment: The need for Transport Integration in Newcastle* (May 2008) p.32, 35 and *NEWCASTLE Towards a*

Sustainable and Vibrant City - a Proposal for CBD Integration, (Dec 2008) p.32. It is proposed to fully utilise Newcastle Station as a tourist destination by using the currently unused upper levels for tourist accommodation and realise commercial opportunities in unused ground floor areas. There are untapped sources of revenue within this heritage building.

The May 2008 document (*Sustainable Transport in an Urban Environment: The Need for Transport Integration in Newcastle* included the concept of a sympathetic development, a new building opposite to the existing heritage station, which "could advance the commercial viability of the site, through the provision of prestige office space, as well as presenting retail opportunities at concourse level." (p.40) Again this is seen as an opportunity for a revenue stream, which could be used to improve and maintain regional transport.



Figure 1 - Newcastle Station sympathetic development concept drawing

The SOR proposal for a viaduct over Stewart Avenue, with a raised Wickham Station would have the advantage of grade separation of the road and rail at this busy intersection but would also allow adaptive re-use of the existing Wickham Station. The purpose of the re-use should be for public benefit, but could also provide revenue, in the form of rental, which could be used for maintenance. Areas under the viaduct could have various commercial uses, such as storage, parking or light retail, kiosk or coffee outlet providing active street frontage.

The most recent concept Save Our Rail is exploring, not yet completed or published, involves lowering a section of the Newcastle Rail Line into a trench, similar to a recent project at New Lynn, NZ. This concept would allow for the covered section of rail line to be used for building and other purposes, including access over the line. Many opportunities would come

with this option, as the land would be available for other purposes, with part of the line and some stations underground.

* This is a more costly option than others proposed by Save Our Rail, though it would not exceed the cost of proposals put forward by other groups whose aim is to close the rail line to achieve use of the land.

This could be a more cost effective way to gain the use of that particular land while not losing the valuable rail link to Newcastle CBD.

SOR believes the rail line is the only way to transport the critical mass of people the CBD needs to revitalise inner Newcastle. It has been estimated that 170,000 passengers can be effectively transported to Newcastle station per week. This transport is not being fully used and requires promotion. However, when big events are held, such as New Year's Eve celebrations and Fat as Butter music festival it is important to have this capacity. In peak times both lines are well used by commuters, with usage highest at Newcastle Station. (Ref. Hunter Railway Station Usage Statistics – Rick Banyard.)

The patronage increase envisaged in the State Plan is dependent on "high standards of customer service," which can only be achieved by more fully utilising the asset of the rail lines, with additional rolling stock and the building of better amenities, so that commuters will choose rail as a preferred option.

The trench option would provide the connectivity between the new Honeysuckle development and the older Hunter Street business sector, which is claimed to be the main reason for demands to close the rail line.

2. Generating income for funding future infrastructure projects.

The above items would fall into the category of having the potential for generating revenue for future transport use, as well as land value capture.

3. Facilitating sustainable urban renewal and development.

Rail is widely acknowledged as the most sustainable form of mass transit, which is why most cities endeavour to keep their trains running. Cities where rail has been taken out are putting it back.

SOR aims to keep Newcastle on track and adopts the slogan of: IMPROVE NOT REMOVE.

The previously mentioned SOR proposals have been prepared with the intention not only to ensure the retention of rail direct into Newcastle but also with the wider concept of improvement for the city and the people of the Hunter Valley.

The Executive Summary introducing *NEWCASTLE- Towards a Sustainable and Vibrant City* begins as follows:

In its vision for a thriving and sustainable Newcastle, Save Our Rail identifies problems of connectivity and addresses community needs in this proposal. The resulting solutions aim to retain sustainable transport while overcoming the

need to connect new commercial and residential developments with established business areas of Newcastle.

A current development proposal by General Property Trust suggests that to achieve connectivity the Newcastle rail line should be cut. Save Our Rail demonstrates that rail services are essential to the success of Newcastle's revitalisation and that it can become an integrated city without the sacrifice of this mass transit asset.

The proposal then outlines various measures that can create access between the new and established business centres, it shows the way to overcome the traffic snarl of a major connecting road crossing the rail line as well as addressing the need for pedestrian crossings at intervals along the line. The entire proposal has the aim of improvement, not only easing mobility within the city but creating a more attractive environment, with landscaping and a wide concourse to unify the cultural heart of the city.

The recognition of Newcastle as the major regional centre is not ignored with measures to better connect new land releases with rail to facilitate worker movement between the other Hunter cities, Maitland and Lake Macquarie and the new Honeysuckle opportunities.

Cost has been a consideration, each of the items being a fraction of the cost of cutting the line and building an unnecessary interchange. A cost benefit analysis of any one proposal or combination of several would stand up favourably against any proposal to close the line and build replacement terminus facilities elsewhere, which would disadvantage Hunter commuters, and would constitute a huge waste of public money.

The proposals are not dependent on each other so that if unlimited funds were available all could be provided at great benefit to the city, but in the reality of the scarcity of funding and the competing bids for it, any one of the suggestions could be brought into existence comparatively cheaply.

One additional crossing would be a huge benefit to the success of businesses in its proximity.

Making Newcastle Station more accessible by opening gates at the western end and putting back the exit to Bolton Street would provide an immediate benefit for those commuters who have to walk the whole length of the station before gaining access to the platforms. (p.30 - 31)

We commend the proposal for a viaduct at Stewart Avenue. (p26, 27) This would put a stop to the complaints about having to wait for trains there. The viaduct was suggested with cost in mind being much cheaper than lowering the rail or building a road tunnel under it, and it would still stack up favourably against the notion of cutting the line and putting in "light rail" at huge cost.

"Light rail" cars are not actually light and require tracks on which to run. There would still be a need for crossings over the tracks to provide access. Therefore the notion of replacing the heavy direct rail service with light rail does not make sense. We argue this would take out an efficient system capable of transporting huge numbers, direct from Sydney and the Hunter Valley into the Newcastle CBD while planning to replace this with an empty space and "future" installation of a lesser system, which would disadvantage commuters with a forced interchange. This would constitute an inappropriate utilisation of a rail corridor.

The use of some other type of rail car, such as Tramtrains, capable of using the same rail tracks, could be acceptable as an addition to the current rolling stock use. This could provide

additional frequency as an aid to increasing patronage. Light rail services added to existing rail, extending to other parts of Newcastle city area, would be an advantage, but these cannot replace the heavy rail because they are unable to serve the long distance needs of the Hunter Valley and Newcastle to Sydney passengers.

The use of the Newcastle rail corridor as proposed by Save Our Rail would assist in the revitalisation of the city and maintain connection with the region.

4. Facilitation of transit oriented development schemes around railway stations.

See above concepts re Newcastle Station and the Newcastle Rail Line in documents already mentioned.

A further SOR proposal, launched in Nov 2010, *Western Transport Initiative (Westrans) Concept Proposal* has the thrust of increasing the frequency of trains on existing lines, reopening unused rail lines and providing express buses in areas where no rail exists. The frequency issue would create a climate suitable for the provision of Park and Ride stations in key locations, which would incorporate other services and business ventures. This aspect of the proposal would be a catalyst for TOD. The whole proposal, which would foster greater use of public transport over the wider area of the Hunter Valley, would therefore also create more encouragement for development along rail lines and around stations.

5. Connectivity of communities either side of railway lines.

The measures in the major SOR proposal, *NEWCASTLE – Towards a Sustainable and Vibrant City*, address comprehensively the connectivity issues for the Newcastle CBD, which can be overcome relatively easily. This has not been fully addressed by developer groups because there has been a reluctance to accept a solution which would not yield for development, the land the rail line occupies.

This land has such importance because it is the only Newcastle land not undermined.

Therefore simple solutions such as level pedestrian crossings have been dismissed without due consideration by the Hunter Development Corporation, which had carriage of the decision previously.

Stairs and Lifts

Many Hunter stations present difficulty for passengers of low mobility, offering only steep stairs for cross access.

Passengers with heavy luggage, young families with small children and prams experience difficulty as well as those with physical disability at stations including Victoria Street, East Maitland, Waratah and Cardiff. Lifts similar to those provided at Beresfield would be welcomed at these stations.

In the construction of lifts it would seem to be logical for some other amenities to be incorporated into the structures where possible. For example, if there is a concourse connecting the upper of lower levels it may be appropriate to include a kiosk or other feature for passenger comfort.

Water Features and landscaped Crossings

Cities throughout the world have overcome connectivity issues with creative solutions, including water features as at San Diego (USA) and Hastings, (NZ). These are user friendly and very attractive. A pool with fountains would be a great way to eliminate fences and would be a great vote winner for any Government that puts them into Newcastle.

Level Crossings

The cheapest and easiest method of access is to install pedestrian level crossings. These can be very safe, with automatically operated locking gates, which close off to pedestrians when the train is approaching and reopen when it has passed. This type of crossing already exists at Merewether Street, Newcastle and has been installed at Woonona and Berry NSW in recent years.

In NSW though there is no prohibition of level crossings there is a great reluctance to install them.

The National Rail Safety Regulator points to risks associated with level crossings. However the NSW Government can determine on the basis of need and risk assessment whether a crossing is warranted. In Newcastle the connectivity issue is claimed by some to be so serious that a rail line should be closed to overcome the problem. SOR proposes that any connectivity problem can be overcome as outlined. Railcorp has documented procedures for the installation of level crossings, (Ref: *Engineering Manual Right of Way* TMC 521 – Version 2.2). There is no reason therefore, to believe that the Newcastle Line should be threatened with closure in order to achieve connectivity.

Not one passenger has been accidently killed at a level crossing in NSW within the last five years. (There have been suicides). On the other hand there have been fatalities and serious accidents on stair overpasses. People have attempted to jump from them onto trains, people have fallen on the stairs and objects have been thrown from them, causing damage and injury. They are not DDA compliant, are very intrusive in appearance and pose a risk. Therefore there needs to be a policy of replacement of these ugly structures with the more user friendly option of level crossings.

Cities have rail lines running through buildings, some have connecting bridges between buildings or raised sections of rail line while others put road tunnels under the rail line. These are just some of the possibilities for greater connectivity.

Two examples could be:

The Hunter Street TAFE building could be linked to the proposed University campus with a bridge, building to building over the rail line. This would provide for a close relationship for the art students at both institutions.

At Civic Station a building above the line could link developments on both sides. If it was a library accessed by University students, who often use library facilities at night it could have an added bonus of providing passive surveillance of the station area, which would add to security.

We recommend that a positive investigation into creative ways to overcome the connectivity issue at Newcastle should be undertaken with a view to a solution which would benefit the whole community, including businesses interests, developers and commuters who currently need and use train transport.

6. Current planning and policy framework

There is a need for the NSW Government to be proactive in planning to ensure that the best use is made of rail line air space. It is important that efforts be made to ensure that the spaces above and below rail lines are put to the most efficient use in order that passengers are provided for in the best possible way, and the aims in the State Plan for 2021 in regard to increasing public transport use are able to be fulfilled.

Community consultation needs to be undertaken more comprehensively than previously. Many new developments have been allowed without any public transport provision or planning. The result is the numerous new housing developments, distant from the cities and towns, with the triple fronted garages and three car families forced to depend on car transport, for work journeys, for student transport and for leisure outings.

Some land releases in the Maitland district are poorly connected to the rail line (ref: *Sustainable Transport in an Urban Environment*).p.28,30 The situation is a disincentive to the residents in these new housing estates, who tend to drive rather than face difficulties in accessing train services Air spaces on the Hunter Line should be utilised to provide replacement stations at Farley and Oakhampton, to build a station at Aberglasslyn and to connect the northern side of Metford to the rail station.

7. Regulatory and policy barriers to implementing rail corridor projects.

Level Crossings

As mentioned previously the question of a lack of level crossings, where they could provide easy access should be addressed because the community is disadvantaged when people cannot easily move around in a city. This can be a disincentive for developers, whose land or existing assets are not readily accessed.

The National Rail Safety regulator's judgement is predicated on vehicle accidents at level crossings. However the risk is very much reduced when looking at pedestrian level crossings, and is especially negligible when considering those with up to date safety features, including not only bells and warning lights but automatically locking gates. Therefore the NSW Government should facilitate their installation where a demonstrated need exists and where the lack of connectivity is hindering development.

Biased authorities and 'inquiries'

Previous inquiries into the viability of closing the Newcastle Rail Line (relevant to the use of its air space) have been carried out with a lack of transparency. Submissions handed to the Minister for the Hunter at the time were supposedly passed on to the Hunter Development Corporation, which had been tasked with conducting the inquiry. (HDC could not be considered impartial as its existence depends on development, and with not much land available it is obviously interested in using the land the rail line occupies – the only Newcastle land not undermined.) Therefore the group put in charge of advising the Government was itself biased towards cutting the rail line.

HDC submissions were not placed on the website or published and the recommendations that came forth were heavily and widely criticised for inaccuracy and references to previously discredited reports.

We have been assured that transparency would be the new order under the O'Farrell Government.

This Current Inquiry

SOR is of the opinion that the presentation of material circulated with regard to this important inquiry is deficient in that:

- There was no information distributed in the form of a discussion paper.
- No definitions were provided.

Some community groups were not advised of the inquiry. SOR heard about it "via the grapevine". This community group represents thousands of people who travel by train from the Hunter Valley towns, including Maitland, from Lake Macquarie and the Central Coast into Newcastle. SOR information and policy documents had been presented to the local MP, at two meetings with him recently, held in his office, therefore he was very aware of the existence and interest of this group in questions to do with rail.

Therefore it seems remarkable that The Terms of Reference document was not sent by him to this large representative group. He had our documents and contact details so how could we have been overlooked? The statement made was that he distributed information to "interest groups." As a result of the late receipt of any information regarding the inquiry this submission has been hurriedly compiled. Other groups have not been aware of the inquiry.

It is very important to consider the views of the wider community before making decisions on infrastructure that could affect those living and working in a locality.

Save Our Rail is not opposed to development; in submissions to present and past governments we have put forward progressive ideas for overcoming problems in Newcastle and the Hunter. The group is, however very concerned to retain a valuable piece of infrastructure, which is needed and used by the travelling public, to build on this rail line for the best outcome in terms of both development and transport.

8. Issues relating to the financing and funding of such projects.

There has been for some time an obsessive requirement for government budgets to be "in the black." This inhibits the provision of projects for public utility. The Sydney Harbour Bridge is a case where it would not have been built if this preoccupation had been a factor. The government of the time borrowed for it and it was paid for through the Bridge Toll over many years. There was a similarity over the expensive but exciting venture of the Opera House. A major Lottery got over the problem, trading on the Aussie propensity for gambling. The Governments of the times took the gamble for both of these structures and they are among our most successful tourist attractions.

Public transport is often condemned as failing to make a profit. It should not be judged on this basis. Public transport is an essential service and should be subsidised to ensure it is efficient. The cost of public transport is recouped in other ways – car parking is costly and the use of public transport reduces the need. Roads are costly to maintain, so if people leave the car at home there is a saving on road maintenance. If freight is transported by rail there will be fewer trucks on roads greatly reducing wear and tear on them. Traffic accidents are more frequent if there is road congestion – use of public transport can reduce medical costs through fewer accidents. Governments should invest in public transport, especially rail as it is accepted as the most sustainable form of mass transit. If a project will assist in the encouragement to use public transport it should be funded. The profit will come in the form of improvement to the environment, less congestion on roads and improved amenity.

In the case of provision of improvements to rail line access or utilisation of air space around rail lines, there are many ways which could assist in the generation of income:

- Provision of car parking always needed near rail stations. Passengers will be prepared to pay for secure parking, especially long day parking.
- Supply of food and drinks passengers need such outlets; travelling uses energy therefore sustenance is a constant need.
- Provision of things to do while travelling reading materials and hobby items.
- Specific travel items for comfort and support e.g. blow-up cushions, rugs, cosmetic supplies, diaries and notebooks, souvenirs and curiosities.
- Destination places of interest museums, art galleries etc.
- Traveller accommodation backpacker hostels at stations as well as first class hotels.
- Function centres at destination stations.

9. Methods of assessing the compatibility of projects with the local community

Local communities demand and deserve to have a say in whatever is proposed for their locality.

They need to have a say in:

- Future needs and priorities
- What is to be retained (heritage or iconic dimensions)
- What needs to be removed (no longer needed or no longer viable)
- Development approvals
- The environment tree planting or removal, water quality- contamination issues
- The shape and liveability of the town or city

Therefore in the matter of the utilisation of rail corridors most of the above points need to be considered.

The methods for determining the community opinion can be varied. However there needs to be:

- Opportunity for open debate, discussions and presentation of factual information (more than one meeting), both sides presented and with unbiased chairing of meetings.
- Time to consider propositions
- Questionnaires to collect data and opinion
- Wide distribution of information (not just internet), letterboxing and local paper publicity.
- Consideration of informing and consulting with disabled members of community, the elderly and the youth.
- Opportunities and encouragement for submissions

The community view is not necessarily reflected through an elected council or similar body, which can be reflective of factions. The community view must be determined by undertaking a variety of methods, and ensuring the views are truly representative.

If the only materials presented are from the view of the proposer/developer or if meetings are chaired in a biased fashion there will ultimately be community backlash and projects can be delayed for this reason.

10. Examples of best practice from other jurisdictions

i) Perth – Fremantle.

The rail line between Fremantle and Perth was proposed to be taken out but the intervention of forward – thinking academics concerned with sustainability reversed the thinking.

The two cities are now linked with frequent train services, which connect not only into the Perth CBD but direct train transport is available in both directions far out into the suburbs and regional areas. Perth's station area is directly linked to shops, with lifts and connecting ramps. The line runs underground for part of the way and there are lifts and ramps for very easy access to the platforms and across the line.

ii) Los Angeles to San Diego

The diesel train carries passengers from LA direct to San Diego, a distance similar to the trip from Newcastle to Sydney.

In San Diego there is also a complementary light rail taking passengers the short distances within the city area. The tracks run parallel and share the same transport corridor. Passengers are able to cross the lines readily, via level crossings, some with stunning water features.



Figure 2 - Level crossing in San Diego, USA with landscaping and water feature (1 of 2)



Figure 3 - Level crossing in San Diego, USA with landscaping and water feature (2 of 2)

The very beautiful Santa Fe rail station has been retained, with commercial activities occurring within it while still serving as a station. This is the sort of development that should be possible in Newcastle and the Hunter area.

iii) Moscow

The Moscow Metro is a world class transit system, a showpiece in fact. Trains arrive at less than 2 minute intervals, the underground stations are decorated with sculptures and other art works, well lit escalators carry the passengers to their departure platform and it is clean and efficient and very well used.

It should be noted that when other aspects in Russia were and are in decline the railways have been maintained. The Trans-Siberian Rail line runs for more than half the length of Russia,

through the Ural Mountains, on to Lake Baikal and terminating at Vladivostok. It is an electric train service, and in the same corridor, but on multiple sets of tracks, which link to a network north and south, freight trains carry coal and every other sort of product. Rail is the long haul form of transport, with run-down, ancient small trucks doing some short distance road transport.

iv) Auckland, NZ

In Auckland the rail lines were closed. A later administration had them re-built at great expense and with some private funding. The Brit-O –Mart station near the Harbour, is a magnificent heritage building, adapted to allow for commercial refreshment outlets, tourist sales kiosks, and rail ticket sales within the ground floor area. Escalators and some sloping ramps transport passengers to the underground platforms. The station works with the adjoining department store to the extent that electronic rail information boards in the store show train departures, in real time.

A new project at New Lynn has placed a section of rail line into a trench. This frees land above for other purposes, including crossings. The New Lynn trench was built without interruption to both passenger and freight services, using a revolutionary process of slewing the line onto the side of the trench during construction.

v) Charlotte, USA

Charlotte has a section where the rail line is raised above the road as has been suggested by SOR for Stewart Avenue in Newcastle and which is planned for the North West rail line in Sydney. This provides great opportunity for use of space under the rail corridor.



Figure 4 - Elevated station in Charlotte, USA

vi) Hastings, NZ

In Hastings the space adjacent to the rail corridor has been landscaped with pools and fountains, replacing fences to create a magnificently cool city oasis. The pedestrian crossing would be a welcome feature on the Newcastle Line.



Figure 5 - Water features incorporated into rail corridor in Hastings, NZ



Figure 6 - Pedestrian crossing and water feature in Hastings, NZ

These are some examples of the way rail transport can work to help in the successful development in cities and that TOD can be undertaken with diligence and imagination to cause cities to prosper.

The NSW Government has a task ahead of it to overcome the deficit in public transport development, with for many years the major improvements being in road construction. It is recommended that the focus now needs to shift to rail improvement and that overseas and other Australian cities can provide the models for this change of direction.

"SAVE OUR RAIL" and "IMPROVE NOT REMOVE"