Submission

No 33

INQUIRY INTO THE UTILISATION OF RAIL CORRIDORS

Organisation: Sutherland Shire Council

Name: Mr Ingo Koernicke

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Submission to the

Legislative Assembly Committee on Transport and Infrastructure Inquiry into the utilisation of rail corridors

by Sutherland Shire Council

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1.0 Introduction

Situated within the Sutherland Shire are two rail corridors that form part of the CityRail network, the Eastern Suburbs and Illawarra Lines. In total there are 13 railway stations the majority of which form the nucleus of many of the shire's town centres. Approximately 52,000 passenger trips are made on the rail network from the shire per day (BTS 2010).

The Sutherland shire like many other local government areas, accommodate only a part of a network of rail corridors that are vital to the function of major cities. For Sydney, rail corridors present significant challenges as well as opportunities that will require a targeted, long term funded, coordinated and binding whole of government / agency commitment, if accessibility and development activity within the city is to be revitalised.

This submission looks at

- the role of Transit Orientated Development (TOD) in creating more compact, sustainable and liveable cities,
- the potential health and environmental impacts associated with rail activity in rail corridors,
- the need to support active modes of transport as a means to compliment and reinforce rail use and reduce car dependence in urban areas,
- environmental severance caused by rail activity and rail corridors

2.0 Rail Corridors and Sydney's urban form

The influence of rail corridors is seen in the distinct radial urban form of Sydney (focused on the Sydney CBD). The construction of the rail network during Sydney's early formative years is reflected in the city's growth and development, with much of its residential areas and town centres clustering along the main rail lines. From the 1950s the impact of increased motor vehicle ownership and use, together with land use policies that favoured "infill" urban growth between the rail lines and along the arterial road network has resulted in urban sprawl that is no longer the solution for Sydney, but rather, increasingly proving to be socially, economically and environmentally unsustainable.

Sydney's population and urban growth, is affected by various factors that include the high cost of housing on the fringe, declining household size, increasing commuter costs, vulnerability to peak oil, housing and lifestyle preference and traffic congestion. In response to these challenges the aim of the NSW Government's Metropolitan Plan to 2036 is to create a "more compact, networked city with improved accessibility, capable of supporting more jobs, homes and lifestyle opportunities within the existing urban footprint". To this end the integration of rail corridors and land use policies that support Transit Orientated Development could compliment and help achieve this objective.

2.1 Rail Corridors and Transit Orientated Development (TOD)

The principle of Transit Orientated Development (TOD) is consistent with the Metropolitan Plan's vision to create a "more compact, networked city". TOD's main aim is to concentrate mixed use and residential development around transport nodes such as railway stations, so as to provide residents in those areas with the opportunity to access the majority of their work and non-work needs by active transport (walking and cycling) and public transport. TOD has been used as a major strategic land use / transport planning platform in the United States and parts of Europe over the past 20 to 30 years to better manage urban growth and congestion.

The application of TOD in the United States has shown from experience that it can without appropriate land use controls / policies and market incentives, result in areas being gentrified and functionally specialised, causing the displacement of lower income residents, reducing access to jobs and increasing labour costs. The significant improvement of accessibility to jobs and services promotes gentrification which then results in car ownership and car trips increasing in response to people's need to access a broader range of goods and services. This has further contributed to city congestion (Heffernan 2006).

2.1.1 Centre / Transit Hierarchy Typology

If the principles of TOD are to be applied in Sydney, it is suggested that a transit hierarchy / typology be established for centres with railway stations under a single planning instrument / strategy. The aim of this typology is to ensure that a coordinated, consistent and whole of government approach can be applied to better manage land use and transport infrastructure within centres and railway stations situated along a rail corridor. This would provide greater certainty as to the mix of uses and type of residential development appropriate for each location.

The Department of Transport , "Guidelines for the Development of Public Transport Interchange Facilities (2008) goes some way to defining centre / railway station / interchange characteristics by defining centres and railway stations according to their primary function i.e used for park and ride or a public transport hub. By applying a typology / hierarchy, issues such as air space development, the intensity and type of mixed use development, the location and provision of commuter car parking, bus / rail / taxi interchange facilities, lighting, pedestrian linkages and cycling access can be better and more strategically addressed.

Recommendation :

- *That a centre/ railway station hierarchy typology be adopted for rail corridors. Its objectives should be complimented with actions that are strategically synchronised and implemented through state and local planning instruments and Subregional Strategies and reflect the principles of TOD.*
- *The centre / railway station hierarchy typologies should be defined according to measures that include transport function, surrounding commercial activity, dwelling numbers and services within the centre area.*

- *That the centres / railway stations hierarchy typology be created spatially along the rail corridors so that the centres / stations do not adversely compete or diminish their intended function and are able to best facilitate public and or active transport.*

This approach it is suggested would provide greater certainty, consistency and direction in the provision of infrastructure and investment in land use development along rail corridors.

2.1.2 Development incentives for TOD along rail corridors

As noted above, TOD relies strongly on the diversity and concentration of land uses around a transport node and access by active transport. The critical population densities and degree of mixed uses needed to sustain TOD can be a major challenge for existing centres, where development incentives to grow and or diversify are needed.

In the UK and US, this is addressed through tax and floor space incentives that aim to stimulate redevelopment. Where multiple ownership of property exist amalgamation patterns linked to floor space incentives could also be considered. However, this may not be sufficient alone to attract the desired level of mixed use activity and may need to be complimented by additional improvements to the public realm (e.g parks and community facilities) and relocation of infrastructure such as car parks. These public realm improvements and infrastructure construction could be funded through Section 94 contributions received upon redevelopment.

Car parking in centres is often a determining factor of the feasibility of a development. In larger centres communal off site car parking may be an option where the density is such that this can be economically feasible. This type of scheme would require either initial funding provided by Council or Section 94 style contributions at an early stage from the developers to ensure that parking is provided prior to the occupation of the dwellings. For s94 contributions to play a role in this regard the State Government will need to amend the Environmental Planning and Assessment Act accordingly.

Existing development within the centres is often the main source of affordable housing; future redevelopment to create an integrated transport hub/commercial centre has the potential to displace lower socioeconomic groups. A state legislated ratio of affordable housing could be set to ensure that a portion of new dwellings are affordable. To encourage greater affordable housing an FSR bonus may be provided as an incentive to ensure the project is still economically viable.

Recommendation :

- *That a best practice guide outlining a range of incentives be developed by the State Government in conjunction with Federal, Local Government and development industry stakeholders to support mixed use and affordable housing. Issues that should be addressed include FSR bonuses, S94 contributions, tax concessions, car parking provisions etc.*

3.0 Rail Corridors - Noise, Vibration and Dust Pollution.

The Metropolitan Plan identifies “46 existing and emerging” multimodal transport corridors. Although these corridors are opportunities to better integrate transport and land use activity they are also areas likely to be subject to noise, vibration and air pollution impacts, and social impacts such as severance, loss of open space and displacement of communities.

The benefit of applying policies such as TOD for new and existing rail corridors needs to be complemented by strategies that address impacts from noise, vibration and dust pollution resulting from rail operations. Exposure to dust and noise and vibration pollution can have major impacts on health and well being that include anxiety, sleep disturbance, increased risk of heart and lung/ airways related disease, stress and hearing impairment. In the case of vibration, building integrity can be affected. The impact from noise, vibration and dust is especially relevant in view of forecasts that predict freight movement to double in Sydney over the next ten years.

Residents in the Sutherland Shire have expressed their concerns to Council echoing the research findings of health professionals globally which, over the past 5 to 10 years, associate various adverse respiratory health impacts to fine particulates (PM2.5 and less). Diesel powered locomotives (which are used by rail freight operators along the Illawarra line for example) are a primary source of particulates along rail corridors.

Although RailCorp and the Australian Rail Track Corporation (ARTC) are required to meet Environmental Protection Licence requirements and are engaged in pollution reduction programs, it remains a major concern that the impacts from particulates are unlikely to diminish significantly in the short and medium term as EPA licence conditions do not operate retrospectively on older existing locomotives.

There are many broader benefits to the community in increasing rail usage that include reducing the impact of freight haulage on the road network. The issue of air quality can be resolved but will need to be addressed through measures that include long term investment in electrification of the rail lines and / or dedicated rail corridors for freight with appropriate buffers.

Recommendation:

- *Long term strategy and funding commitment to electrify rail corridors used by freight, complimented with a phasing out of diesel rolling stock.*

- *To better inform the community and relevant government authorities of the environmental health impact and risks from noise, vibration and air quality impacts, the Department of Transport in conjunction develop for new and existing rail corridors:*

- *noise / vibration contours maps (similar to airport ANEF) for all rail lines in the Sydney metropolitan area (dBA average and peak 6 am to 10pm, 10pm to 6am)*
- *noise / vibration contour maps showing number of noise events above 60dBA for an average day*
- *average and total number of peak freight movements*
- *dust contour maps showing likely PM2.5 dispersion*

Persons living adjacent to a rail corridor or wishing to purchase property should be informed of the potential noise and air quality risks via s149 certificates.

4.0 Compatibility of Active Transport (Walking and Cycling) and Rail Corridors

Rail corridors present major opportunities for active transport (cycling and walking), due to their width, strong direct links to key centres, employment, schools and services as well as gentle grades / topography. These characteristics make them fundamental to creating a more compact city built around the principles of Transit Orientated Development. Active transport can complement the rich mix of land use development enabling many short trips to be undertaken without the need for a motor car, significantly reducing traffic congestion and car dependency, as well as greatly improving public health, community cohesion and interaction.

Including active transport uses within a rail corridor should be considered as not only complementing TOD by providing links to railway stations and facilitating active transport trips within and to key centres but also a means by which active transport can be effectively retrofitted into a city.

4.1 Need for the Sutherland Cronulla Shared Pedestrian Cycleway

The Sutherland – Cronulla shared pedestrian cycleway raises the issue concerning compatibility of uses within rail corridors. In the Sutherland Shire where there is a high level of car dependency, the Sutherland to Cronulla rail corridor presents not only a vital cycling pedestrian link between its major centres, schools and recreation areas but also an opportunity to significantly increase mode share to active transport use. This is supported by the community who in 2006 presented a petition signed by over 3,000 residents to the Minister for Transport.

The benefits and opportunities to the community of incorporating a shared cycleway along the rail corridor for active transport was confirmed in a report prepared for the RTA and Sutherland Shire Council by GTA in 2010. It showed that various sections of the rail corridor situated outside of the rail operational safety zone are suitable to accommodate active transport uses.

The GTA study compared various alternative links and concluded that the rail corridor was the best option as it provided the safest, direct and attractive links between major centres, schools and employment nodes as well as completing a major regional link between the south west of Sydney and coast.

Although RailCorp are not supportive of active transport within rail corridors, it is of note that shared pathway precedents exist and include the Sydney Harbour Bridge and

Parramatta – Liverpool cycleway. In the Sutherland Shire, footpaths are leased on RailCorp land within the rail corridor.

If activities such as shared pathways are to be part of the benefit that rail corridors can provide to the community, it is vital that the conflicting objectives between Local Government, RMS and Rail Corp be resolved through an independent transport authority. A clear example is the Sutherland Cronulla rail corridor where the community strongly supports an active transport solution along sections of the rail corridor, the Council and RMS see its vital function to retrofit local and regional bike and walking accessibility, yet RailCorp have no interest in supporting non rail activity.

Recommendation

- *That active transport uses (cycling and walking) be permitted within rail corridors where they do not affect operational safety criteria.*
- *RailCorp be required to broaden its strategic transport planning role to include measures that support active transport in its corridors,*
- *That a binding strategic based alliance to facilitate various activities within rail corridors be created between Rail Corp, RTA and Local Government*
- *Development consent for non rail activity within rail corridors be delegated to a Transport / Planning authority that has carriage of integrated transport in Sydney.*
- *That the Sutherland to Cronulla cycleway link be supported by the State Government as a demonstration model for compatible uses within a rail corridor*

5.0 Rail Corridors and Environmental severance

Rail corridors can sever not only urban areas but also natural areas. Fences along the Illawarra line between the Royal National Park, Heathcote National Park and Garrawarra State Conservation Area are key examples.

For natural areas such as these, rail corridors become a major barrier when they are fenced. This may affect the seasonal movement of fauna responding to the availability of food and water or threat of bushfires and flooding. The restriction in movement may also adversely affect population diversity and integrity.

Although rail operational safety is a factor in the construction of fences along rail corridors greater consideration is needed with regard to the adverse environmental impacts they create. It is considered that a more balanced approach needs to be adopted that best reflects the level of risk and degree of environmental impact.

Recommendation:

That an independent government appointed panel of technical and scientific experts with appropriate terms of reference and powers to assess and determine the impact of fences on environmental severance, identify alternative opportunities where possible, and address rail operational safety be created.

6.0 Conclusion

Rail corridors present major opportunities to help revitalise Sydney's land use and transport. TOD policies provide a platform that can be incorporated into rail corridor planning to best manage and deliver a more sustainable and robust urban form that has the ability to flexibly respond to global changes. To assist this process, rail corridors need to provide nodes of mixed use activity that have defined transport typologies and hierarchies and must be supported by good walking and cycling links.

Retrofitting a more accessible transport network into Sydney requires Rail corridors to be used much more flexibly than ever before. They can for example provide vital opportunities for cycling and walking without affecting operational safety, to not only support local business, services and affordability but help deliver people to train stations and interchanges.

The planning and delivery of measures to make best use of rail corridors must incorporate a whole of government approach and not be constrained to a rail agency or operator. The constraints and opportunities that exist are complex in a city such as Sydney where retrofitting is required and benefits and interests are more diverse than can be reasonably managed by one level / agency of government.