

## WARRINGAH TRANSPORT CORRIDOR INQUIRY (1983)

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### BACKGROUND

In May 1981, the New South Wales Government set up a Commission of Inquiry into the Warringah Transport Corridor, a former County Road reservation connecting the Warringah and (proposed) Gore Hill Freeways at Naremburn with the Burnt Bridge Creek deviation at Balgowlah. Commonly known as the Warringah Freeway route, this corridor had been proposed for use by the Department of Main Roads (DMR) as an extension of that expressway across Middle Harbour at Castlecrag, to feed into the Manly-Warringah peninsula road system at Wakehurst Parkway (Seaforth) and Condamine Street (Balgowlah).

Seen by its critics as a Los Angeles-style monster funnelling cars into the city centre, as indeed it inevitably would through its existing connection to the Harbour Bridge, the expressway was in fact part of a somewhat more sophisticated system. Firstly, through the Gore Hill Freeway and Epping Road it was to cleanly link Manly-Warringah with northwestern Sydney. Secondly, discerning readers of the Sydney Area Transportation Study (1974) (SATS) would have observed two points:

- (a) that it was part of an inner ring-route extending through a second harbour crossing (Greenwich-Birchgrove), the Johnston's Creek route and St Peters to Botany; and
- (b) that it was suggested as a simultaneous route for a Warringah railway extending from the North Shore Line at St Leonards. The implications of the report of the Commissioner, Mr David Kirby, for these potential uses of the corridor are discussed in this article.

Mr Kirby, a Sydney barrister, had previously conducted an inquiry into the Kyeemagh-Chullora corridor and, in that instance, had generally favoured rail over road transport of freight from Port Botany. In the case of the Warringah corridor, the State Labor Government had abandoned proposals to construct an expressway, but local Councils had urged the Government to retain the corridor and properties acquired within it. The Commissioner was requested to consider the options of either abandoning the corridor, constructing the road in whole or in part, or developing public transport in the corridor. Some 841 submissions were received by the Inquiry and Mr Kirby's 360-page final report to the Minister for Transport was made on 29 April 1983. The findings of the report were made public on 18 August 1983.

Although the Manly-Warringah peninsula (incorporating the local government areas of Manly

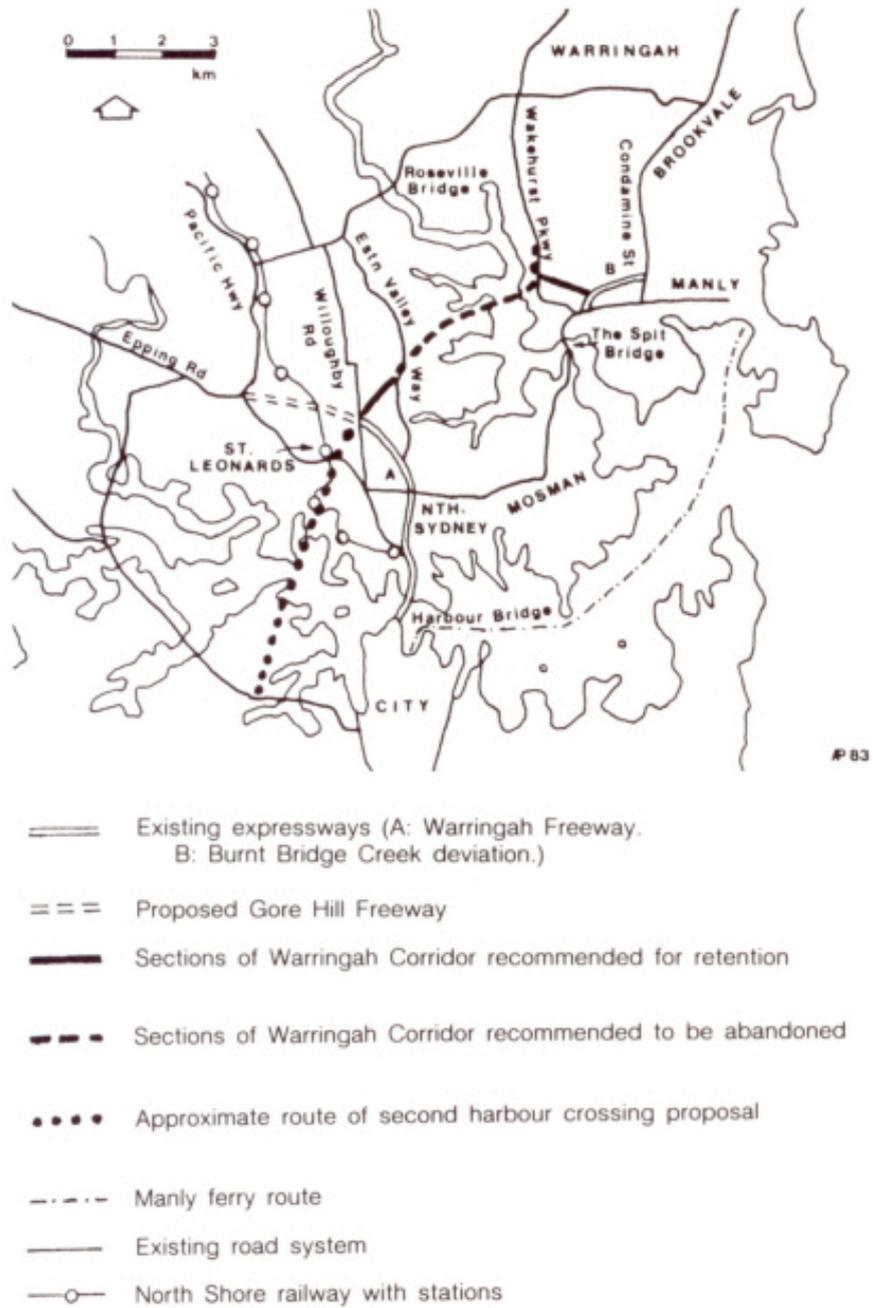
Municipality and Warringah Shire) holds a population approaching a quarter million, it is separated from Sydney's north shore by the major waterway of Middle Harbour. Only four existing transport routes connect the peninsula with the rest of Sydney. These are Mona Vale Road (the oldest route) at the extreme north, Roseville Bridge (originally opened in 1924), the Spit Bridge (opened in 1924 and preceded by a punt service dating from c1850), and the Sydney-Manly passenger ferry (dating from 1855). Recent planning policy has been to restrict further population growth in Warringah, by not releasing new areas for subdivision and development, in order to restrain pressures on this "bottlenecked" transport system. Officially, this policy of restricted development is due to a preference for land-release in western and south-western areas of Sydney. However, the policy reflects the absence of an independent mass transit system (such as an electric railway) to service the peninsula. Although proposals for Manly-Warringah railways had been made earlier in the century by Dr J. J. C. Bradfield and others, the plans never came to fruition. This has left the peninsula the only major urban area of Sydney not provided with such a system (apart from the south-eastern suburbs), until the recent development of the Castle Hill and West Fairfield sectors (for which transport corridor proposals have been formulated).

Before the dramatic post-war increase in motor car usage, the peninsula public transport system was oriented towards the Manly ferry. However, now the ferry performs only a minor role, servicing a limited catchment around Manly. Bus services have largely by-passed the ferry, feeding commuters directly to the city or the north shore. A TRANSAC survey of 1975/76 gives the following breakdown of commuters leaving the peninsula at morning peak:

***Mode Percentage***

Bus via Spit Bridge	11 .39
Bus via Roseville Bridge	3.18
Bus via Mona Vale Road	0.28
Manly Ferry	7.82
Total Public Transport (corrected)	22.63
Motor Car - all routes	77.37

Although ferry patronage has increased substantially since 1976 (over 90%), Kirby's report noted that this increase had been almost entirely in recreational, not commuter patronage. Thus, contrary to the expectations of some of its champions, the Manly ferry performs a minority role, incapable of expansion due to its water-based catchment constraints and the reluctance of commuters to change transport mode en route. The bus system is capable of more flexible expansion. On average, Kirby's report notes, public transport has only been able to capture 18% of the peninsula travel market, compared with the metropolitan average of 28.8% (1976 figures). A State Transport Study Group survey (1976) gives the following breakdown of Manly-Warringah resident workforce destinations, by local government area:



### ***Destination Percentage***

Manly-Warringah (i.e. locally employed)	48.11
Sydney/South Sydney (A)	23.36
North Sydney/Mosman (A)	9.44
Willoughby/Ku-ring-gai	7.94
Other	11.15

Of the above categories, those indicated (A) would be most directly benefitted by city-oriented mass transit, that is approximately 60% of those leaving the peninsula.

A final background consideration which affected the outcome of the enquiry was the environmental factor. The Warringah Corridor extended across an outstanding natural area, including the northern bushland escarpment of Castlecrag and the scenic drowned valley of Middle Harbour. These factors were probably the crucial determinant of Kirby's recommendations on the corridor.

## **ROADWAY OPTIONS**

Basically Mr Kirby found that the existing road system, with limited improvements, was adequate for motor traffic. In the Kyeemagh-Chullora Inquiry he had aired the view that motor car traffic will expand to fill a vacuum, and in Sydney - despite the claims of the road lobby - no such thing as a total traffic failure, seizure or blockage has occurred, nor will it. When traffic flow passes tolerable constraints, motorists (particularly those driving by choice rather than necessity) turn to options such as alternative routes, public transport, or even other lifestyles.

If Warringah was opened for further development, the additional population might justify additional road capacity, but this would doom the prospects for public transport. As Professor W. R. Blunden, a consultant to the Inquiry, stated:

" ... it is vital to recognise that a prerequisite to the viability of a mass transport system is that private transport must be suitably constrained either by parking, road capacity or regulation. To proceed now with the entire Warringah Freeway project would doom forever a rail mass transport scheme to serve the Warringah Shire .... What is screaming out for recognition is that a railway to Warringah would bring the City within forty minutes reach, and thus raise the accessibility of the region in quite a dramatic way."

In Blunden's terms, Kirby ruled out as extravagant the combined road-railway facility suggested in SATS.

In his final recommendation Mr Kirby stated that two parts of the road corridor might be retained, providing for:

- (a) A link road between Willoughby Road (the present termination of the Warringah Freeway) and Eastern Valley Way. This arterial road would serve the function of connecting both the Warringah Freeway and the proposed Gore Hill-Epping Road link with Warringah through the Roseville Bridge route. Except for a section of Eastern Valley Way, this route would remove through traffic from residential streets and shopping centres.
- (b) A link road between Wakehurst Parkway and the Burnt Bridge Creek deviation. Again, this would expedite through traffic and remove it from residential/community precincts. Mr Kirby criticised the wastage of land brought about by the width and design of the Burnt Bridge Creek deviation, a criticism which, hopefully, will cause the DMR to be more economical in its urban expressway designs.

Eliminated from these road recommendations is the link across Middle Harbour. Mr Kirby thus provides road-access relief for the peninsula, whilst removing the unnecessary intrusion of a freeway into the scenario for a permanent mass transit system.

## RAILWAY OPTIONS

Mr Kirby stated the obvious: that the Warringah peninsula is public transport poor. It is, he noted, one of the few areas in Sydney without a rail alternative. He had little trouble reaching the conclusion that "a rail facility to Warringah would act like a magnet, attracting a substantial proportion of the 28,000 people who may conceivably use it".

He had difficulty extracting information from the State Rail Authority (SRA) and Urban Transit Authority (UTA) and requested additional submissions. He noted that the SRA "appear to have their hands full in maintaining the present system", the very suggestion of a Warringah railway bringing panic to [their] eyes", a syndrome which will be familiar to many readers. However, Kirby concluded that "the gap between the Freeway option [at least \$150 million] and an underground railway [at least \$200 million] is not so large ... as to make the latter any more a 'pipedream' than the former". The gap "is likely to narrow with the effluxion of time because technological advances which can be expected in tunnelling." The tunnel alternative to a bridge over Middle Harbour moved into favour due to evidence from Mr J. M. Taylor, a former project engineer for the Eastern Suburbs Railway.

The political basis for the SRA's despondency emerged in a later interview held by the *Sydney Morning Herald* with the Minister for Transport, the Hon. P. F. Cox, M.P., who said: "It [the railway] would cost more than that. It is just beyond the State's capacity." Nobody has ever emerged to question the inherent deficiencies in Australian public administration which perpetuate syndromes such as this. It is of interest to compare the above estimates with the cost of the Harbour Bridge and railway electrification project of the 1920s/30s, calculated in 1980 values by Robert Gibbons: \$489 million. In no other context would anyone suggest the State has less economic 'capacity' than in 1930.

It is likely that the Inquiry was impeded in its consideration of a railway option by the absence of a specific proposal, compared with the DMR's detailed expressway plan. Several proposals, including those of Bradfield (1915 and 1923-5), envisaged an underground (or partly above-ground) line through Mosman Municipality, crossing Middle Harbour in the vicinity of the Spit. (Construction of this line had actually commenced at North Sydney in the 1920s.) Another of Bradfield's plans was a line from Gordon on the north shore, to follow the alignment of Mona Vale Road. Thirdly, there was the SATS proposal utilising the Warringah Corridor. Unlike the Mosman route, this line would serve no significant regional centre between St Leonards and Brookvale. Accordingly, Kirby made no allowance for railway stations in costing of the line. Also a terminus and bus interchange at Brookvale was assumed, unlike the SATS proposal where the line extended to Newport. Bradfield's plans had included a branch to Manly which certainly would have put paid to the ferry.

The SRA, in its submission, gave lukewarm support to retention of the corridor for possible future use as a railway. However, it gave no consideration to commuter preferences, preferring to maintain the gloomy view that, at best, a railway would be no less financially viable than the existing bus system.

In the final analysis, Mr. Kirby appears to have been more persuaded by J. M. Taylor's tunnelled

railway, at least in the long-term. In his only recommendation allowing for retention of the entire Warringah Corridor, Kirby suggests that it be no wider than required for a double-track electric railway (12 m) and employing viaduct construction rather than cut-and-fill on the Castlecrag escarpment. By implication, the tunnel option becomes more attractive. Even so, the costing of a surface railway within the corridor, and without stations, was estimated to be about \$100 million, considerably less than an expressway. Journey time between Wynyard and Brookvale was estimated at about 26 minutes and train headway was assumed to be, at worst, 12-15 minutes. The Inquiry touched only briefly on the facility a railway would offer for travel to the northern beaches, particularly assuming an extension through Dee Why and Mona Vale. Unfortunately no analysis was made of this aspect, leaving Sydney's only other seaside railway, the Cronulla line, to prove a somewhat obvious point. The matter of energy savings was also briefly raised.

Finally, the question of the loss of the eastern Harbour Bridge railway tracks (originally planned for a Warringah railway, but used by trams for some years) was laid to rest as the Inquiry established that the two-track North Shore Line held the capacity to take in Warringah trains. The only problem lay in the capacity of the two "north shore" platforms at Wynyard, in view of the long unloading times of double-deck trains. The question of reopening the other two high-level platforms at Wynyard was given some airing and was suggested for inclusion in consideration of design of a Warringah railway.

In general, Mr. Kirby appeared to favour an amalgam of the Bradfield/Taylor tunnelled railway via Mosman. The Warringah Corridor route bypasses the important Cremorne-Mosman region and would necessitate a continuing major bus facility connecting the peninsula with Mosman-North Sydney. However, the corridor may be the only practical alternative, should the tunnelling options prove too costly.

## **LIGHT RAIL OPTIONS**

This option, initially the most promising, was ultimately excluded as a practical possibility. To start with, the SRA and the UTA made the telling point that such a facility could not reach the city, and indeed, if confined to the corridor could only extend as far as St. Leonards or, at best, North Sydney where passenger interchange with the North Shore railway would be required.

The Inquiry considered the obvious benefits of light rail, including its melding of the flexibility advantage of buses with the speed and priority advantages of trains. Mr. Kirby soon pinned his examination of light rail down to its routing via the corridor, as the Cremorne-Mosman area was already too congested to incorporate a light rail route. An unspoken thought here might have been that, if expensive tunnelling had to be adopted, it would be better used for normal rail service.

However, the fate of light rail as a consideration was determined by the Harbour Bridge. A light rail authority, Mr. John Dunn of Commonwealth Engineering (NSW) Pty. Ltd., told the Inquiry: "If you can't get across that bridge I think you can forget it ...." He supported the views of the SRA and UTA on interchange factors. A suburban public transport interchange might be fine, but not one two kilometres short of the city destination. If light rail could cross the bridge, it could then terminate at the hitherto-mentioned disused high-level platforms at Wynyard, but in Kirby's words, the impediment was "the tantalising gap between Milson's Point, and the disused tram tunnels which

give access to Wynyard."

The former eastern tracks on the Harbour Bridge have long since been converted to seventh and eighth road lanes, feeding into the Cahill Expressway. A proposal currently exists to replace the eastern pedestrian footway with a ninth lane. A bridge at North Sydney linking the former eastern tracks with North Sydney Station has been demolished. Thus there are considerable obstacles to reinstating additional rail of any sort to a bridge that was conceived fundamentally as a railway bridge. Such is the injustice of history. In fairness, Mr. Kirby looked at all the options of installing additional tracks somewhere on the bridge and drew a negative, though one must question his readiness to rely exclusively on the evidence of the DMR in this regard. (The DMR argued against it partly on the grounds of aesthetics, notwithstanding the deleterious effect of their own ninth road lane on the appearance of the bridge.) The only option not directly explored was that of re-converting the seventh and eight lanes to railway tracks. This will be discussed further.

## **FERRY OPTIONS**

The Manly ferry came a poor last in the Inquiry, largely for reasons outlined earlier. There was no lack of initiative in submissions which were made to the Inquiry, but this did not disguise the truth that reversion to the ferry would amount to turning the clock back half a century. Aside from interchange considerations mentioned earlier, it is a fact that the nature of the ferry service has changed little since 1855: namely one using displacement-hulled ferryboats crossing between Manly and Sydney in about 30 minutes. The hydrofoil option with its premium fare and costs must be precluded from practical consideration. Essentially, there is a severe time-penalty involved in use of the ferry for commuters residing elsewhere than in immediate proximity to Manly wharf and working elsewhere than in immediate proximity to Circular Quay. (See Table 2, chapter 4 of *Sydney's Transport: Studies in Urban History*, ed. G. Wotherspoon, Sydney, 1983.) In addition, on at least several occasions a year, vessels are prevented from berthing at Manly by heavy seas. Kirby concluded that the ferry was "unlikely to play more than a subsidiary role in satisfying commuter needs for the journey to work."

## **ENVIRONMENTAL FACTORS**

The natural scenery of Middle Harbour and the Castlecrag escarpment had a significant bearing on Mr. Kirby's recommendation against a bridge across the former and an expressway along the latter. Although he relented somewhat with regard to a railway, it is difficult to see in practical terms how railway construction would mollify the situation. In particular, railway bridges tend to be more ponderous than those required for a road. Mr. Kirby equated the construction of a bridge across Middle Harbour at Castlecrag with bridging of the Grand Canyon or the Jamieson Valley: "The grandeur, the unity, the integrity of these imposing land forms would be lost." Many would agree with this in the case of Middle Harbour, but it was an argument applied with less justification to the area to be discussed next. Finally, on environmental grounds, an electric railway was seen as superior to all forms of motor transport.

## **A SECOND HARBOUR CROSSING**

This matter did not come into consideration during the Warringah Corridor Inquiry, largely because

Kirby did not have the information to make comparisons. This is unfortunate as, not only was the second harbour crossing proposal publicly aired during the course of the Inquiry (1981/82), but it was relevant to at least two aspects of the inquiry.

During 1981, the NSW. Government authorised the DMR to set up a Second Harbour Crossing Inquiry Team to study the implications of a new crossing. At the same time, a set of alternative proposals was established and exhibited for public comment. The proposals involved a bridge or tunnel west of the Harbour Bridge, linking the proposed Gore Hill Freeway with the proposed Johnston's Creek Freeway (or alternative access to the southern suburbs). As noted earlier, the crossing would form an innermost circumferential route in Sydney's road system - a dire necessity in view of the traditional radial nature of Sydney's roads. The nearest proper circumferential route is via Mona Vale Road, Ryde, Strathfield and King George's Road, about 12 kilometres west of the city. For this reason much north-south through-traffic passes across the Harbour Bridge and through the city.

The costs of the proposals - varying from about \$250 million to \$700 million including approaches and resumptions - shook most people, but, as indicated in discussion of costs earlier in this article, would be no more of a "pipedream" than the Harbour Bridge was in its time. Environmentally, the most attractive proposal, but the most expensive, was the tunnel. The lower figure given above applied to the most immediately feasible option: a bridge stepping from Berry Island via Greenwich and Long Nose Point to Birchgrove, with tunnelled approaches under Gore Hill and Balmain. Although, in this case, the DMR was bending over backwards on environmental grounds (the tunnels would pass under attractive and, in the case of Balmain, historic residential areas) the proposals aroused intense opposition.

The nature of the opposition to the second harbour crossing must be examined to understand the level of public debate on planning issues in Sydney. First, the bridge was opposed on environmental grounds, admittedly justified by damage it would inflict on Berry Island and Birchgrove. However, the "approaches" issue should have been defused by the use of tunnelling. It was not. Second, the most often-aired objection was that it would funnel more cars into the city, an objection which ignored its status as a city by-pass. The National Roads and Motorists Association (NRMA) has estimated that over 50% of cars crossing the Harbour Bridge are travelling to destinations beyond the city. It is ironic to note that the opposition to the second harbour crossing came at the time of the celebrations of the 50th anniversary of the Harbour Bridge (1982). It seemed lost on most critics that, had many of the objections applied to the second harbour crossing been applied to the Harbour Bridge in the 1920s, the latter would not have been constructed. In the face of intense opposition, the Government abandoned the second harbour crossing inquiry, precluding even a preliminary professional analysis of its feasibility. (It can be said, however, that the passage of time and advance of technology should see the most preferred tunnel option move into the realm of economic possibility.)

Thus, on one hand, it can be seen that the prospects for the Warringah Corridor as part of a complete circumferential road system were lost for the foreseeable future. The other aspect of the issue, which nobody discussed, was that, in the light of the NRMA's assertion, enough motor cars (those travelling between north and south/south-west of Sydney) could transfer from the Harbour Bridge to the second crossing to leave the Harbour Bridge clear for eastern suburbs and limited

city-originated motor traffic. Not only would this eliminate the need for a ninth traffic lane but, this writer suggests, the eighth and seventh lanes as well. It is not too far-fetched to conclude that the environmental and public transport lobbies, in "winning" one issue have unwittingly torpedoed another of possibly far greater importance - introducing rail or light rail between the city and Warringah. On the other hand, Kirby's conclusion was that a Warringah (conventional) railway might take enough motor traffic off the Harbour Bridge to remove the need for a second crossing. However, it little idealistic to imagine that a bridge landing in the heart of a city is going to be transformed almost purely to the needs of motor traffic passing around city.

At the "popular" level, the public transport debate in Sydney ignores the complexity of journey patterns in the metropolitan area. It would not be unrealistic to say that a majority of car-based journeys are totally necessary, not only because of the radial nature of public transport system (modified only recently by the Red-Arrow cross-country bus services) but by the multiplicity of originating and destination points of individual journeys, a situation which conventional public transport cannot hope to cater for. There is considerable justification in the viewpoints of both "public transport" and "road" lobbies, but the two have polarised to an intractable degree. In addition, there is an incredible myopia in the field of "resident action" whereby sacrifices in the interest of improved transport are opposed in a particular suburb, with the implication that they might be made in another suburb. By the same token, it is unfortunate that some of Sydney's worst road problems exist in areas that have been built-up for the best part of a century. Nobody likes to seriously advocate demolishing hundreds of houses to clear "paths" which should have been there in the beginning, but it is the only apparent alternative to using residential streets as "highways". The politically untenable option is to close all residential streets and squeeze traffic back onto the original highways - where they exist, and in grid/circumferential terms they simply do not in many cases. The social and economic ramifications of such a policy are almost beyond contemplation.

## **CONCLUSION**

In a sense, the outcome of the Warringah Corridor Inquiry represents a partial defeat for the possibility of setting up a workable grid/circumferential road system in the older-settled part of Sydney, though not as devastating a defeat as the second harbour crossing study fiasco. Nevertheless, Mr. Kirby, in recommending retention of two parts of the corridor, has left a reasonable alternative. The Warringah-western Sydney connection is made via Roseville Bridge, Eastern Valley Way and the Gore Hill Freeway. Manly is perhaps not so fortunate being left with existing routes through Mosman, though access to the north-west is improved through the Seaforth-Balgowlah route.

The most important outcome of the Inquiry is its firm declaration in favour of a permanent mass transit system for the peninsula. To many, Kirby's advice was a statement of the obvious, but it would not be inaccurate to say that the recommendation is embarrassing to the Government. Kirby throws up the bald fact that this sizable proportion of Sydney residents are not provided with a satisfactory public transport system. (Indeed, if one includes the factor of reasonable public transport access to Sydney's finest beaches, the population affected is much greater.) In addition, although Kirby goes to great pains to avoid this, a further implication is that current land-release

policy is misdirected. Not only is Warringah slightly closer than the western sectors to the city, with its attendant benefits (not to mention the beaches), but it is obviously a more attractive and climatically equable living environment than the hot, exposed and polluted Cumberland Plain. In this sense, the absence of mass transit facilities close to the coast has encouraged the westward sprawl of Sydney.

Critics were quick to recognise this, though in a perverse way. Peninsula real estate agents attacked Kirby's report (not the Government) for "dooming" the prospects of additional land-release and "jeopardising" recreational development by precluding the expressway option. The opposition spokesman on transport, Dr. T. Metherell, M.P., declared that the recommendations had "torn the guts" out of transport planning for the peninsula. It can only be assumed that these critics had not read the report properly.

Mr. Kirby's report is indubitably epochal as an analysis of the transport needs of a geographically defined urban sector in Australia. Inevitably, however, Kirby was constrained by his terms of inquiry and could not delve into the crucial issue of the land-release policy or the implications of a second harbour crossing. Sadly, the residents of the peninsula have had to wait until the stamp of Kirby's authority could be given to the obvious fact that successive governments have largely ignored their public transport needs. Even more sadly, the Government's response (or lack thereof) indicates that the need will be ignored for much longer.

The Warringah Corridor Inquiry, through the medium of Mr. David Kirby, has significantly contributed to raising the level of public appreciation of transport planning as a community issue. At the same time it has highlighted the prevalent small-mindedness and ignorance in this area. Ideally, a community should be supplied with factual information from which to formulate an intelligent appraisal of their transport requirements. Unfortunately, this approach conflicts with the desires of political parties and lobby groups to operate by "sloganeering". (This must be due partly to the influence of the popular media. "Government Scraps Freeways" is a message with greater popular impact than the truth, namely: "Government scraps radial freeways duplicating the role of public transport, but retains circumferential freeways bypassing the city.") All this aside, the practical outcome of the Inquiry will be that a railway will probably not be built, the two sections of roadway may be built, and the Castlecrag escarpment and Middle Harbour will be preserved, with resumed land being returned to private ownership. Supporters of electric urban transport may well see further development in Castle Hill and West Fairfield before electric transport is introduced to the Warringah Peninsula.

Mr. D. S. Kirby, B.A., LL.B. *Report of the Commission of Inquiry into the Warringah Transport Corridor*. New South Wales Government. 1983.

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