

VICTORIA

Report

of the

STATE DEVELOPMENT COMMITTEE

on

LAND TRANSPORT TO WEBB DOCK

Ordered by the Legislative Assembly to be printed

MELBOURNE
F D ATKINSON GOVERNMENT PRINTER
1982 83

C O N T E N T S

	<u>Page No.</u>
The State Development Committee - Personnel	4
Functions of the State Development Committee	5
Terms of Reference	6
Conclusions	7
Recommendations	10
Introduction	12
History	12
The Inquiry	15
Webb Dock Shipping Terminal	16
Present Berthing Facilities	16
Current Shipping Services	17
Webb Dock Cargo Throughput	20
Present Trade	20
Future Trade	22
Future Railed Container Movements	23
Rail Access to Webb Dock	23
Factors Limiting Choice of Alternatives	23
Geographical Limits	24
Section of Track from Pigott St., to Yarra River	25
Alternative Routes South of Yarra River	27
Route 1A - Lorimer St. Extension Route	27
Route 1B - Lorimer St./Todd Rd. Route	28
Route 1C - Lorimer St./Todd Rd./Rear of Aircraft Factories.	29
Route 2 - West Gate Freeway Route	30
Construction Specifications	30
Standard Gauge Connection	32
Cost Estimates of Alternative Rail Routes	32
Basis of Cost Estimates	33

	<u>Page No.</u>
Cost of Rail Works in Port Area	33
Evaluation of Rail Alternatives	34
Justification for a Rail Link	36
Economic Considerations	36
Social and Environmental Aspects	39
Other Considerations	41
Recommendation	43
Road Access to Webb Dock	45
The Road Network	45
Expected Road Traffic Growth	46
Alternative Road Access Proposals	47
Williamstown Road	48
Todd Road/Lorimer Street	50
Lorimer Street Extension	50
Plummer Street	51
West Gate Freeway Connection	51
Costs of Road Alternatives	52
Views of Interested Parties	53
Evaluation of Road Alternatives	58
Conclusion	59
List of Witnesses	61
Acknowledgments	65

A P P E N D I C E S

- Appendix "A" - Diagram showing alternative rail routes.
- " "B" - Diagram showing alternative road routes.
- " "C" - Table 1 - Cargo forecasts for Webb Dock.
- " "D" - Table 2 - Webb Dock Railed Containers Forecast.
- " "E" - Table 3 - Cost estimates of alternative rail proposals.
- " "F" - Table 4 - Road Link Container Costs to/from Webb Dock.

MEMBERS OF THE STATE DEVELOPMENT COMMITTEE

LEGISLATIVE COUNCIL

THE HONORABLE ROBERT IAN KNOWLES

THE HONORABLE RODERICK ALEXANDER MACKENZIE

THE HONORABLE KENNETH IRVING WRIGHT

LEGISLATIVE ASSEMBLY

CECIL WILLIAM BURGIN, ESQUIRE

NEIL MALCOLM McINNES, ESQUIRE

DONALD KELSO MCKELLAR, ESQUIRE

JAMES LIONEL SIMMONDS, ESQUIRE

JOHN HAMILTON SIMPSON, ESQUIRE

Chairman: THE HONORABLE ROBERT IAN KNOWLES

Deputy Chairman: JOHN HAMILTON SIMPSON, ESQUIRE

Secretary: ALAN NORMAN CASTLE, ESQUIRE

State Public Offices
1 Macarthur Street,
Melbourne. 3002.

FUNCTIONS OF THE STATE DEVELOPMENT COMMITTEE

To Inquire into and Report to the Governor in Council upon -

- (a) the balanced economic, industrial and rural development of the State;
- (b) the decentralisation of industrial activities and the distribution of population in the State;
- (c) the improvement of the general economic welfare of the State;
- (d) the amelioration of the conditions of industrial and rural life in the State;
- (e) the organisation and development of primary, secondary and other industries in the State;
- (ea) any proposal, matter or thing referred to it by the Governor in Council.

R E P O R T

To His Excellency the Honorable Sir Henry Winneke, K.C.M.G.,
K.C.V.O., O.B.E., K. St. J., Q.C., Governor of the
State of Victoria.

MAY IT PLEASE YOUR EXCELLENCY

Pursuant to the State Development Committee Act, the State Development Committee has the honor to submit the following Report on its Inquiry into Land Transport to Webb Dock.

TERMS OF REFERENCE

- (a) present and likely future movements of containers by land to and from Webb Dock;
- (b) the need for improved land transport to Webb Dock, through the provision of a rail link and/or by upgrading the road systems;
- (c) possible alternative routes for such links and the costs and benefits of the alternatives. Road alternatives to be considered are to be confined to an area including and to the north of Williamstown Road to the Yarra River. Rail alternatives are to exclude a rail link along the foreshore adjacent to The Boulevard and a rail link along Howe Parade.
- (d) which of the alternative routes, if any, should be developed taking into account economic, social, environmental and technical aspects;
- (e) what organisations should bear the costs of developing any recommended routes;
- (f) any other factors relevant to the provision of land transport to Webb Dock.

C O N C L U S I O N S

1. The provision of rail access to Webb Dock, on the one hand, and road access, on the other hand, are complementary matters which should not be considered in isolation.

2. The establishment of a rail link to Webb Dock would be attended by the following benefits:
 - (a) Significant and continuing annual cost savings would accrue to the Australian National Line, in particular, and other users of the Terminal, arising out of the removal of the necessity to carry cargo by road between Webb Dock and convenient rail-heads.

 - (b) The connection of Webb Dock to the Victorian rail system would remove a long-standing impediment to this rapidly expanding dock complex achieving its full potential as a major shipping terminal, capable of handling the most commonly used forms of inter-modal transport.

 - (c) The diversion of a proportion of Webb Dock throughput to the rail system, with its comparative fuel efficiency as against less fuel efficient road transport, would result in a transport link more in harmony with the national aim of fuel conservation.

 - (d) A rail link would offer a least cost transport link from the seaboard to country areas and interstate and would stimulate the growth of trade in intermodal transport between Victoria and other States.

- (e) Where rail and road transport charges are of a similar order, exporters, importers and other port users would be offered the choice of two different modes of transport which is not presently available.
 - (f) The establishment of a rail link to Webb Dock would strengthen the position of the State of Victoria to meet the challenge from South Australia to capture a share of the valuable container trade which is centralised currently in Melbourne.
 - (g) The advent of a rail connection would be a forward step in a sociological and environmental sense, being a development which would result in a reduction of heavy commercial traffic on Williamstown Rd. and other major access roads serving residential areas, as well as Webb Dock.
 - (h) A dual gauge connection, providing for standard gauge as well as broad gauge travel, would add flexibility to the rail system which would be in the national interest.
3. The question as to whether a railway line can be operated on a payable basis, particularly in the early years of its establishment, represents the major area of concern should the Victorian Railways Board be required to fund the project wholly from its own financial resources.
 4. Subject to a satisfactory formula being evolved for the funding of the project on the basis of shared financial responsibility, the establishment of a rail link to Webb Dock would be in the best interests of all port users, the Port of Melbourne Authority, community interests and the State of Victoria alike.

5. Of the feasible alternative rail links, Route 1C (Lorimer St./Todd Rd./rear of sites occupied by the Commonwealth Aircraft Corporation and the Government Aircraft Factories) has most to commend itself, having regard to economic, sociological, environmental and technical considerations.
6. With containers capable of being carried by rail likely to comprise some 16% to 20% only of all expected container traffic passing through Webb Dock at the turn of the century, the maintenance of an adequate road access system to meet increased traffic demands is clearly a paramount consideration.
7. Williamstown Road and the other roads in the arterial road system serving Webb Dock have adequate capacity to cater for present and immediate future traffic needs, including additional traffic which will be generated as a result of the increased use of Webb Dock facilities, with or without the provision of a rail link.
8. The build-up in traffic on Williamstown Road and other major access roads, which also serve residential areas, will create the need for new access roads to be developed, in the longer term, from the north, where an industrial environment prevails.
9. Transport depots currently operating from essentially residential areas of the City of Port Melbourne, some of which have direct links with Webb Dock, are contributors to the volume of heavy commercial traffic on arterial roads of that municipality which serve residential communities in addition to providing access to the Dock.

RECOMMENDATIONS

- (1) A railway line be constructed, as soon as possible, to connect Webb Dock with the 5'3" broad gauge system at Pigott St. north of the Yarra River, in accordance with the design and specifications outlined by the Railway Property and Construction Board, the alignment of the railway to follow Route 1C (Lorimer St./Todd Rd./ rear of sites occupied by the Commonwealth Aircraft Corporation and the Government Aircraft Factories).
- (2) In the design and construction of the rail link, provision be made for the addition of a third rail at 4'-8½" (1.435 metres) standard gauge, to supplement the initial 5'-3" (1.600 metres) broad gauge.
- (3) The capital cost of the provision of the rail link (estimated by the Railway Construction & Property Board to be \$11,826,000) together with the cost of the rail works necessary within the boundaries of the port area (estimated by the Port of Melbourne Authority to be \$4,000,000), making a total estimated cost of \$15,826,000, be shared in equal one-third proportions between
 - (a) the State Government;
 - (b) Victorian Railways Board; and
 - (c) Port of Melbourne Authority.
- (4) The rail link should follow existing road reservations, insofar as it is practicable to do so, in order that the least disturbance is caused to adjoining Crown leaseholds.
- (5) The Country Roads Board should maintain a monitoring programme of traffic flows on Williamstown Road and other major access roads to Webb Dock, directed towards ensuring that heavy nuisance traffic does not exceed a level which would seriously impair the amenity of neighbouring urban areas.

- (6) The Country Roads Board plan for the future development of a Lorimer St/Iodd Rd. road link or a modification of that route, with the object of alleviating the effect of heavy vehicles upon Williamstown Rd. and other major access roads to Webb Dock which also serve residential communities.
- (7) The relocation of transport depots, at present operating from urban areas of Port Melbourne, to an industrial zone either within or close to the boundary of the port area, be immediately investigated.

I N T R O D U C T I O N

The history of land transport to Webb Dock is, for the large part, a history of railway proposals. Access to port facilities, particularly by rail, has been under consideration since the commencement of the construction of Webb Dock in the early 1950's.

Some six major rail proposals have been prepared over the last 30 years, each with a range of possible construction types. This has led to a large number of options for rail construction.

Consideration has also been given to road proposals over the years. However, largely because of the heavily trafficked nature of streets in the Port Melbourne area, road transport has been seen by the local community as less satisfactory than rail due to the perceived impact of heavy vehicles on the community at large, particularly with the rapid growth of Port Melbourne's industrial area over recent years.

Even though many rail proposals have been prepared since the 1950's, nearly all of them have been the subject of wide public criticism. This is the case with regard to the existing Howe Parade rail reservation, which was not opposed by the Port Melbourne Council initially, but was later opposed and which remains in the planning scheme to date.

H I S T O R Y

In 1952, the then Co-ordinator of Transport (now Director of Transport) requested the Victorian Railway Commissioners to consider a route for a railway, which would provide for the passenger and goods traffic to be expected from the further development of the Port of Melbourne and the construction of the River Entrance Docks.

The proposed route was included in the Melbourne Metropolitan Planning Scheme 1954 and provided for a branch line from the Port Melbourne line near North Port Station, passing on an elevated structure down Bridge Street and traversing the area north of Plummer Street.

In 1961, the Melbourne and Metropolitan Board of Works was informed that the Victorian Railways no longer required a passenger capability in the area. Under these conditions, the proposal became unduly costly and alternative routes were considered, preference being given to a route via unused sidings built in 1942. Later this area came under the control of the Housing Commission.

In 1965, the Port Melbourne City Council, the Melbourne Harbor Trust Commissioners and the Victorian Railways Commissioners agreed that the route to the dock should be along Howe Parade and, in April 1968, an amendment to the Melbourne Metropolitan Planning Scheme was approved to provide for a railway line along the middle of Howe Parade.

After the River Entrance Docks Railway Construction Act, 1970, was passed by Parliament, considerable public reaction resulted, with community groups indicating resentment to the possibility of a rail line in Howe Parade disrupting the residential amenity of the area.

The Government, in June 1974, appointed a Steering Committee consisting of representatives of the Port Melbourne City Council, Country Roads Board, Environment Protection Authority, Melbourne and Metropolitan Board of Works, Melbourne Harbor Trust, Victorian Railways, the then Railway Construction Board, and local community groups. In September 1974, the Committee presented its report to the Minister for Local Government, outlining a number of possible routes for a Webb Dock railway link.

In March 1975, the Government appointed the "Investigation Committee for Government Projects in the Port Melbourne/South Melbourne Area" to examine the overall co-ordination and direction of planning and development in that area. This Committee, chaired by Mr. J.R. Ashworth, consisted of representatives of the Ministry for Conservation, Ministry of Transport, Victorian Railways Board, Country Roads Board, West Gate Bridge Authority, Melbourne and Metropolitan Board of Works, Town and Country Planning Board, Housing Commission and Melbourne Harbor Trust.

In its recommendations of August 1976, the "Ashworth Committee" stated that "Having regard to all considerations, The Boulevard Surface Rail Project be proceeded with in conjunction with a complementary road project".

In addition to the "Ashworth Committee", the Melbourne Harbor Trust commissioned, at the Government's request, an environmental and sociological study of the impact of the Trust's plans for the development of the port area.

The study was carried out by the Centre for Environmental Studies, University of Melbourne, with the first stage of the study dealing with road and rail access to Webb Dock.

The road alternatives examined were as follows:-

- (1) Upgrading Williamstown Road;
- (2) Lorimer St. Extension;
- (3) Lorimer St./Todd Rd., access;
- (4) West Gate (at grade); and
- (5) West Gate (grade separated).

The examination of rail access was confined to the following three routes:-

- (a) The Boulevard;
- (b) Howe Parade; and
- (c) Lorimer St.

The Centre's first report, published in December, 1976, entitled "Land Transport Alternatives for Webb Dock", recommended that;

- (1) Webb Dock road container traffic be diverted away from the Garden City residential area by connection to Westgate-at-grade; and
- (2) A spur surface railway line to Webb Dock, connecting with the existing Port Melbourne railway line, be constructed along the alignment of "The Boulevard", subject to certain restrictions on operating times.

In May, 1977, the State Co-ordination Council, after making an assessment of possible alternatives, using prior investigations as base material, recommended that the construction of The Boulevard route should proceed.

However, commencement of work on the project did not proceed, as public concern mounted about the environmental consequences of The Boulevard route.

In June, 1980, the Government announced that The Boulevard route would be excluded from all future consideration of rail access to Webb Dock. This decision followed a much earlier decision to abandon proposals to construct a rail line along the Howe Parade route.

On 19th June, 1980, the State Development Committee was requested by the Acting Premier to inquire into the whole question of "Land Transport to Webb Dock". The terms of reference provided to the Inquiry placed no limitations on the scope of the Committee's investigations, with the exception that The Boulevard rail route was specifically excluded as a possible alternative.

Following further correspondence and negotiations between the Chairman of the Committee and the Minister of Transport, from which it emerged that the Government did not wish the Committee to consider the previously rejected rail route along Howe Parade, the Committee was advised by the Acting Premier on the 25th May, 1981 that Item (c) of the terms of reference for the Inquiry had been amended so that the Committee's investigations would be limited to the following alternatives:

"Possible alternative routes for such links and the costs and benefits of the alternatives. Road alternatives to be considered are to be confined to an area including and to the north of Williamstown Rd. to the Yarra River. Rail alternatives are to exclude a rail link along the foreshore adjacent to The Boulevard and a rail link along Howe Parade."

It will be apparent, from this brief outline of events, that the question of "Land Transport to Webb Dock" is a very complex and long-standing public issue, in which changing Government and community attitudes towards developmental proposals have influenced thinking on this subject to a large degree.

T H E I N Q U I R Y

The Committee made inspections of the feasible alternative rail and road routes, in company with representatives of interested bodies, such as the Ministry of Transport, Port of Melbourne Authority and West Gate Bridge Authority.

With the co-operation of the Australian National Line and the Port of Melbourne Authority, visits were made by the Committee to the Webb Dock Shipping Terminal, where the methods employed to exchange containerised and non-containerised cargoes between ship and road transport were examined. Through the courtesy of Sea Pak Transport Services, the Committee was shown the techniques employed by the Company to consolidate and deconsolidate containers.

The Committee, in association with the Port Melbourne City Council, took the opportunity of studying the impact of heavy commercial road traffic upon residential areas of the municipality.

Submissions were invited from interested parties by means of direct canvassing of potential witnesses and through the agency of public advertisements inserted in the Melbourne press.

Sworn evidence was heard from 28 witnesses in Melbourne, whilst a number of written submissions were received and considered from other parties.

WEBB DOCK SHIPPING TERMINAL

Webb Dock is already a vital area of the Port of Melbourne, serving both the overseas and interstate trades.

It is the major general cargo handling facility outside the Yarra River. Originally the terminal was developed to handle coastal trade with Tasmania but it now handles four overseas services.

Much of the development planned to take place within the Port of Melbourne over the next two decades will be at Webb Dock, further increasing its significance to the Port of Melbourne Authority, port users and the community.

PRESENT BERTHING FACILITIES

Webb Dock currently has four operational berths, each with their own adjustable ramp. There are four wharf cranes, one of which is a single-lift container gantry crane. The berths and the 16 ha cargo handling and storage area behind the wharf are operated by the Australian National Line under lease and first-call agreements.

Berth No. 5, which is due to come into operation in late 1982, will have a container crane, a movable floating ramp and about 6 ha of back-up area. This berth will become also part of the ANL complex.

The Australian National Line has also advised that it is about to purchase a secondhand container crane from overseas so that there will be three cranes available to service Berths Nos. 4 and 5.

CURRENT SHIPPING SERVICES

The development of Webb Dock has been associated with the expansion of the shipping services operated by the Australian National Line and its consortium partners.

Although originally operating a large fleet of general cargo ships, engaged principally in the Australia coastal trades, ANL took the significant decision, in the late 1950's to introduce roll on/roll off vehicle deck vessels to its services.

The first of these vessels, the Princess of Tasmania introduced what was then a highly individualistic roll on/roll off passenger ferry, designed to allow passengers to take their cars with them when crossing Bass Strait.

This new and specialised vessel drew from the port authority a response to establish a new and specialised ferry terminal, in the form of Webb Dock.

The siting of Webb Dock at the western end of Williamstown Rd. outside the mouth of the Yarra River, presented the following advantages:

- (1) By being outside the mouth of the Yarra River, it offered the shortest steaming distance for a regular scheduled passenger ferry.
- (2) Being clear of the navigable channel of the Yarra River, the most frequent vessel movement to and from Webb Dock would not impede the normal traffic to other areas of the port or inhibit the regular use of the river by cargo vessels.
- (3) Being at the mouth of the river, it afforded the capability of 24 hours a day navigation.

- (4) The open nature of the Dock and its approaches minimised the use of tugs.
- (5) Being a container dock, with minimal wharf facing, the new location was a nett addition to the port at minimum outlay and without loss of any existing berths.
- (6) By satisfying the market demand for vehicular passenger movement, Webb Dock released Station Pier to handle the main flow of passengers which then existed.

Notwithstanding the advantages enumerated, Webb Dock suffered from the major drawback, still felt to this day, of being a transit facility for the steady ongoing movement of goods and passengers without the benefit of connection to the railway system, the principal statewide network for the movement of goods and passengers.

Although Webb Dock was created for the primary purpose of being the Tasmanian Ferry Terminal and therefore, became heavily involved with ANL, it was not, in fact, actually leased to ANL. Design and construction were completed by the Melbourne Harbor Trust (as it was then designated), and Webb Dock was retained as a general port facility, although ANL paid a special fee for the privilege of having first call on the berth.

Following closely behind "Princess of Tasmania" the roll on/roll off cargo vessel "Bass Trader" was introduced to the Tasmanian link in 1961 and, with it, the provision of a second berth at Webb Dock became necessary.

From specialising in wheeled cargoes, the Line began concentrating on units and containers handled to and from the ship by fork lift truck. These vehicle deck container ships successfully established the principle of intermodal cargo handling, which has been retained, refined and extended by ANL.

The second significant decision to be taken by the Line was that to expand into regular overseas trading, and it was, in 1969, that "Australian Enterprise" and "Australian Endeavour" inaugurated their respective services.

In accomplishing the operational transition from conventional shipping to specialised shipping, ANL developed its capability to design, build and operate large, more specialised, more sophisticated ships, as well as the capability to efficiently operate container terminals, which increasingly are competing effectively for stevedoring in the market place.

In July, 1981, the Australian National Line was operating a fleet of 33 ships, including 8 coastal and 9 overseas container vessels. To service them and other consortium partners, it operates also 12 terminals, with a share holding in a new terminal in Brisbane and in several specialised terminals overseas, as well as a share holding in Terminal Properties of Australia, which operates the major container facility at East Swanson Dock.

ANL is a member of all major Shipping Conferences operating out of Australia to the Asian and ASEAN Regions and, together with its consortium partners, it is the major carrier in those Conferences.

In submitting evidence to the Inquiry, the Line maintained that it must have vessel and terminal facilities commensurate with that position, in order to fully service the requirements of its clients and it deplored the fact that the lack of a rail link to Webb Dock placed it at a significant commercial disadvantage, compared with its foreign owned competitors, who are operating terminals within the Port of Melbourne which were serviced by rail.

The following shipping services are currently stevedored by ANL at Webb Dock:

Coastal Services

Coastal vessels use berths Nos. 1, 2 and 3. The Empress of Australia takes passengers and their cars to Tasmania; four other vessels carry cargo to Tasmania, Queensland and Western Australia.

Eastern Searoad Service (ESS)

ESS is a service to Japan operated jointly by ANL (two vessels), 'K' Line (one vessel) and Nippon Yusen Kaisha (NYK), Mitsui-OSK Limited (MOL) and Yamashita Shinnihon Steamship Co. Limited (Y-S Line) (one jointly owned vessel).

All four vessels use Webb Dock and each operator slot-charters space on the others' vessels; other conference operators sometimes also slot-charter.

ANLINE

ANLINE is an integrated East Asian service operated by ANL, Asia Australia Express (AAE) and Orient Overseas Container Line (OOCL).

ANL provides two Ro-Ro vessels which use Webb Dock, whilst AAE and OOCL each provide two cellular container lift-on/lift-off (Lo-Lo) vessels which use East Swanson Dock. Each operator slot-charters space on the others' vessels.

ANRO

ANRO is a joint service to South-east Asia operated by ANL (one vessel), Neptune Orient Line (NOL) (one vessel), Nedlloyd Lines, Australia Straits Container Line (ASCL) (one jointly owned vessel) and P.T. Djakarta Lloyd.

All three vessels use Webb Dock and each operator slot-charters on the others' vessels.

Korea Australia Searoad Service (KASS)

In early 1980, Cho Yang Shipping Company Ltd. of Korea joined with the ESS partners, ANL and 'K' Line, to form the KASS service to Korea.

Basically an extension of the ESS service, KASS involves ESS vessels (normally those belonging to ANL), including a Korean port of call in their itinerary. In June, 1981, Cho Yang Shipping Company Ltd., added its own vessel, which calls at ESS ports in addition to Korea.

WEBB DOCK CARGO THROUGHPUT

PRESENT TRADE

Statistical evidence submitted by the Port of Melbourne Authority shows that Webb Dock container throughput for the year 1980/81 was:

Overseas containers:	49,482
Coastal "	<u>65,000</u>
TOTAL	114,482
	=====

In addition, the Webb Dock facilities during 1980/81 handled non-containerised general cargo to the following amount:

Overseas Cargo:	140,000	Revenue Tonnes
Coastal "	<u>970,000</u>	" "
TOTAL	1,110,000	=====

The Australian Line, in presenting evidence, estimated Webb Dock container throughput for the year 1980/81 to be 149,975 containers, a figure which was 35,493 in excess of the Port of Melbourne Authority's estimate.

The Committee has been informed that the difference between these figures can be accounted for by the fact that the non-containerised cargo passing through Webb Dock, viz., 1,110,000 revenue tonnes, consisting of motor vehicles, timber and other commodities, is assessed by the Australian National Line in terms of the container space occupied by this cargo when loaded aboard ship.

Approximately 70% of all general cargo handled by the Port of Melbourne Authority is containerised. The total of 114,482 containers passing through Webb Dock in 1980/81 represents about 22% of all 511,000 containers estimated by the Port of Melbourne Authority to have been handled by all wharf facilities within the port area in that year.

Of the 114,482 containers which currently pass through Webb Dock, the Port of Melbourne Authority estimates that 10,000 are carried by rail to convenient railheads close to the port area such as Freightbases, Montague, Dynon and Conrail Park, with road transport being used to carry the containers between Webb Dock and the railheads concerned. This represents slightly less than 9% of the overall container trade through Webb Dock.

The Ministry of Transport estimated the rail component of the overall container trade through Webb Dock to be 12,000 containers, which represents slightly more than 10% of the total container trade through the Webb Dock facilities.

Of the 10,001 railed containers estimated by the Port of Melbourne Authority to be passing currently through Webb Dock, 6796 container movements are controlled by ANL, including 3090 destined for or originating in Adelaide and 3,706 destined for or originating in Victorian country or border areas.

Assuming that the remaining 3205 containers controlled by other shipping companies are similarly divided between Adelaide and country, it is all too evident that the justification for a rail link to Webb Dock rests heavily upon the continuance of the present transport pattern, whereby overseas exports from Adelaide and imports thereto are shipped through Webb Dock.

FUTURE TRADE

The Port of Melbourne Authority anticipates that much of the major port expansion and development over the next 20 years will occur in the Webb Dock area, because of limited suitable sites in the inner port areas.

Likely future trade through Webb Dock is closely linked with the forward development plans of the Port of Melbourne Authority, which provide for the current 4 berths at Webb Dock to be expanded ultimately to a total of 10 berths. It is proposed that this would be achieved by a changed configuration of the Dock and by its extension both in a southerly or seawards direction and in a northerly direction past Williamstown Rd., as far as the Howe Parade Extension. The Authority emphasized that its forward development plans are flexible and could be subject to variation, as the need arises.

In company with the phased future development of Webb Dock, the Authority visualises that there will be a shift in trade from other areas of the port.

For example, ANLINE'S partners in the integrated East Asian service currently operate a total of four lift-on/lift-off vessels through East Swanson Dock.

However, the Australian National Line anticipates that, in the next few years, these LO-LO vessels will be serviced by Webb Dock, thus boosting Webb Dock container throughput by 17,000 containers per annum.

By the year 2000, it is expected that this total will be increased to some 120,000 containers, again as a result of a shift in trade from older areas of the port to the developing Webb Dock.

This shift in trade, together with a growth in trade of between 2½% and 4% per annum for the existing facilities, is expected to increase Webb Dock container throughput from 114,482 units in 1980/81 to 354,600 units in 2000/01. During the same period, it is expected that non-containerised cargo will increase from 1,110,000 revenue tonnes in 1980/81 to 1,586,000 revenue tonnes in 2000/01.

The increase in cargo volumes through Webb Dock, during the next two decades, is expected to be associated predominantly with the growth of overseas trades.

Cargo forecasts for Webb Dock, showing the throughput in 1980/81, and the estimated throughput at 5 yearly intervals thereafter up to 2000/01, are set out in Table 1 - Appendix "C".

FUTURE RAILED CONTAINER MOVEMENTS:

The Port of Melbourne Authority estimated that the construction of a direct rail link to Webb Dock would result in railed container movements increasing to a figure of 56,700 in the year 2000/01, with an annual growth factor as shown in Table 2 - Appendix "D".

The forecast of 56,700 railed container movements through Webb Dock in 2000/01, represents only 16% of the total 354,600 container movements expected through Webb Dock in that year. These projections point significantly to the fact that, whether or not a rail link is provided to Webb Dock, the road system will continue to fulfil the key role in providing access thereto.

The dependence of future railed container traffic upon the use of Webb Dock as an import and export port for containers packed and unpacked in Adelaide was again underlined in primary evidence submitted on the 19th August, 1981, when witnesses representing the Port of Melbourne Authority estimated that "out of the 56,000 TEU forecasts for the year 2000, we are looking at possibly 20,000 to 25,000 TEUs being involved from Adelaide". (Page 102 of Transcript of Evidence refers). This represents close to 35% of the anticipated railed container traffic through Webb Dock on the basis of the lower estimate and some 45% on the basis of the higher estimate.

RAIL ACCESS TO WEBB DOCK

FACTORS LIMITING CHOICE OF ALTERNATIVES

The Ministry of Transport, in providing evidence to the Inquiry, which included input from the Railway Construction and Property Board, Victorian Railways Board and Country Roads Board, indicated that the

following factors were taken into account by it in the selection of alternative rail routes:

- (a) The rejection by the State Government of all routes passing near the Garden City area.
- (b) The rejection of any connection to the existing Port Melbourne line, to avoid the operational problems and costs of reversing locomotives in the Jolimont yards.
- (c) The intention of the Country Roads Board to plan for long term increases to the capacity of the north/south road link along Footscray Road, as proposed in the Draft Transport Plan 1978 and also in the Victorian Transport Study 1980: Metropolitan Roads. The plans for this include a widening of and possible second road level on Footscray Road and the Charles Grimes Bridge, together with a complex connection to the West Gate Freeway, south of the river.

These plans are compatible with a rail connection leaving the existing system at Pigott Street, north of the Yarra River, and proceeding on the west side of Footscray Road to a new bridge over the River Yarra, west of the road bridge.

However, they are not compatible with a railway east of the road bridge, since this would have to cross the complex road connection between the north to south road and the West Gate Freeway.

These factors restrict the alternative routes to those leaving the Melbourne Goods Yard via the existing line along Pigott Street and crossing the River Yarra on a new bridge to the west of the Charles Grimes Bridge, clear of the Country Roads Board reservation for the future bridge widening, mentioned above.

GEOGRAPHICAL LIMITS

The layout of the railway facilities within the Webb Dock area, including rail tracks, industrial structures, amenities, etc. will be decided upon by the Port of Melbourne Authority and the Victorian Railways Board.

Having regard to this position, the Ministry of Transport's submission on the feasibility and cost of the various rail alternatives was confined to the distance between the point at which the new track would join the existing railway system at Pigott St., near the Melbourne Goods yards, and the point at which a line would enter the Webb Dock port area.

SECTION OF TRACK FROM
PIGOTT ST. TO YARRA RIVER

This section of track would be common to all alternative routes.

After connecting with the existing rail system at Pigott St. on the north side of the Yarra River, the track would proceed on the west side of Footscray Road past the site of the proposed Coronial Services/Forensic Science Laboratory across a new rail bridge to be constructed over the river to the west of the Charles Grimes road bridge.

The evidence tendered to the Inquiry shows that the site of the Coronial Services/Forensic Science Laboratory will suffer some disability as a result of both groundborne (vibration) and airborne noise. The alleviation of this disability will require special provisions, including possibly the isolation of delicate instruments, which are estimated by the Public Works Department to add some 5% extra to the cost of construction.

The railway will be elevated above existing road level at North Wharf Road, since at this point it is climbing to pass over the river. However, it will be possible to raise North Wharf Road up to rail level and thus keep the road open by providing a level crossing, without introducing any alterations to road level in Johnson Street. The level crossing is possible only if the railway bridge over the River Yarra has the minimum constructional depth between rail level and the required clearance point above the river.

The constructional depth can be achieved by the use of a "through" type bridge, in which the main girders are placed at the sides of the track and are connected together by a relatively shallow deck under the track.

The frequency of rail movements, estimated to average two only per 24 hour day when a rail link comes into operation, will cause delays of up to a maximum of 2 to 3 minutes in traffic flows in North Wharf Rd., with a consequential affect on access to the site of the proposed Coronial Services/Forensic Science Laboratory.

Problems of access to the site would be accentuated when the plans of the Country Roads Board to widen Johnson St. and the Charles Grimes Bridge come to fruition, as these roading proposals would require the eventual truncation of North Wharf Road at Johnson St.

The provision of a rail crossing immediately adjacent to the downstream side of the Charles Grimes Bridge would disrupt also the present access and administration area of the A.J. Wagglen Floating Dry Dock.

It would be necessary to relocate the dock about 110 metres downstream, to make new provision for vehicular access to the dock and to relocate the administration block and services.

To achieve this, at least one hectare of hard standing would have to be reclaimed in front of the existing dock access area. Relocation of the floating dock would involve costs estimated by the Ports & Harbors Division of the Public Works Dept. to be of the order of \$1,200,000 for modifications to moorings and access.

This cost assumes that the dock is to be moved only a short distance and that most of the existing moorings and access facilities can be re-used.

Other relocation costs, such as dredging and reclamation works would be substantial, as the Railway Construction and Property Board included an amount of \$3,300,000 for all relocation costs in its detailed estimates of the cost of the various alternative rail routes.

Should any scheme necessitate removal of the dock to a totally new site, relocation costs of a very much higher order would be involved.

However, the Department has no alternative site in mind, at this stage, to which the dock could be moved, nor is it considering, at present, any proposals to construct a new dock of increased capacity at an entirely new site.

ALTERNATIVE ROUTES
SOUTH OF YARRA RIVER

The Ministry of Transport indicated to the Inquiry that an examination of existing and proposed developments has resulted in the conclusion that there are only four feasible railway routes which could be followed from a common point south of the proposed new railway bridge over the Yarra River. The four routes are depicted in Appendix "A".

Three of the alternatives concerned, viz., those designated Routes 1A, 1B and 1C, after passing over the Yarra River, share a common route as far as the junction of Lorimer St. with Todd Rd., whilst the fourth alternative, viz., Route 2, follows an entirely different alignment.

Set out hereunder are brief descriptions of each of the four alternative routes:-

Route 1A - Lorimer St. Extension Route

After crossing the Yarra River, this route proceeds along the north side of Lorimer St., past Todd Rd., as far as the West Gate Bridge, which it passes under before curving to the east, south of the extension of Howe Parade.

A section of this route from near the river crossing to Todd Rd. would interfere with an existing overhead State Electricity Commission high tension power line which would have to be relocated on the south side of Lorimer St., either elevated or underground. Other services would also be affected.

The route would also affect access to the Australian Gypsum overhead truck loading facility, near Gate 25, although there would be no interference with the operation of the facility.

The line would also cross the access to all wharf entrances east of Todd Road. Six of these are customs gates and these crossings would be provided with automatic road signals. The other four crossings of railway between Lorimer Street and the wharves would not be provided with lights.

Approximately 350 cars presently park on the north side of the Lorimer Street reservation between the Charles Grimes Bridge and Todd Road. Construction of Route 1A would eliminate this car parking. The cost of this replacement has not been included in the estimate of cost for the railway.

As there are no existing wharves west of Todd Rd., there would be no further interference with wharf access points but the disturbance to car parking caused by the railway would continue between Todd Road and the West Gate Bridge, directly affecting an additional 740 car parking spaces and also intersecting access to a further 280 spaces north of Lorimer Street.

The railway would cross the access to the bridge viewing area east of the West Gate Bridge. Work at crossings between Todd Road and West Gate Bridge for Route 1A would comprise the construction of two crossings, with flashing lights.

The overhead power line on the north side of Lorimer Street terminates near Todd Road, so that Route 1A, west of Todd Road, would not interfere with this facility but underground cables would require protection.

The route would ultimately pass under the main river span of the West Gate Bridge, approximately 30 metres west of the main pier, passing through an area presently used by the Port of Melbourne Authority for storing poles.

This alternative would eliminate some 1090 car parking spaces in all and affect access to a further 280 spaces.

The major objection to the adoption of this route would be its incompatibility with the forward development plans of the Port of Melbourne Authority for the Fishermens Bend area, which is currently the site of the premises occupied by the Government Aircraft Factories and the Commonwealth Aircraft Corporation.

Route 1B - Lorimer St/Todd Rd. Route

Route 1B follows an alignment along the north side of Lorimer St. as far as Todd Rd., which is identical with Route 1A.

This alternative, instead of continuing westwards at the Lorimer St/Todd Rd., Junction, as for Route 1A, turns south at Todd Rd., crossing Lorimer St., by one level crossing, immediately afterwards crossing Todd Rd. by another, to proceed down the western side of the Todd Rd. reservation.

It was originally intended to divert Todd Rd. to the east of its existing junction with Lorimer St., thus avoiding the level crossing over Todd Rd.

However, it was discovered that this would introduce a serious infringement in the area to the south east of the road intersection, presently leased to the Aeronautical Research Laboratory, where new laboratories have been planned since 1973.

The alignment, as presently proposed, without the deviation of Todd Rd., still enters the land in question but the alignment would not interfere with any proposed buildings.

The route passes under the West Gate Bridge in a position which avoids proposed permanent buildings in the area south of the bridge to be used by the Port Melbourne Council as a works depot.

The provision of a rail link along this alignment would intersect access points to existing or possible future wharves south of the river to the same degree as Route 1A but interference to car parking space would be considerably less, with 350 car parking spaces only being eliminated.

The most significant objection to Route 1B is that its alignment would take it through Crown Land on the west side of Todd Rd., which has been dedicated to recreational development in the guise of Stage 2 of West Gate Park. Construction work has already commenced on Stage 1 of the Park to the east side of Todd Rd.

This route could not be straightened to run parallel with the west side of Todd Rd., because such an alignment would interfere with proposed permanent buildings south of the West Gate Bridge to be constructed by the Port Melbourne Council for a Works Depot.

Route 1C - Lorimer St/Todd Rd/
Rear of Aircraft Factories

This alternative follows the same alignment as Route 1B (viz., Lorimer St/Todd Rd) until the rear of the Commonwealth Aircraft Corporation premises is reached. It then departs from the western side of the Todd Rd. reservation and runs along the eastern side of the un-named but sealed road leading to the Government Aircraft Factories car park. The route would ultimately pass under the West Gate Bridge, between Piers 16 and 17.

The construction of this section of the route would require a deviation of the junction point of the sealed road with Todd Road and the displacement of approximately 110 car parking spaces. This, together with the elimination of some 350 car parking spaces between the Charles Grimes Bridge and Todd Road, would mean a loss of 460 spaces in all.

The alignment of this route is in harmony with the Port of Melbourne Authority's forward development plans for the Fishermens Bend area and avoids interference with the development of West Gate Park.

Route 2 - West Gate Freeway Route

This route, after crossing the Yarra River, instead of following the northern side of Lorimer Street, crosses Lorimer Street at a level crossing immediately to the west of the entrance to Lorimer Street of the proposed exit ramp from the West Gate Freeway. The track would then follow the route of the West Gate Freeway on the northern side, passing under Ingles Street.

At Graham Street a tunnel would be required, so that the railway could pass under without affecting the road connection between Graham Street and the Freeway. The railway would then pass under Salmon Street, proceeding into Cook Street immediately to the north of the Freeway boundary wall.

The railway would cross over Cook Street and Todd Road before passing under the West Gate Bridge and into the proposed marshalling yard south of the alignment of Howe Parade.

The alignment of this route conflicts with the development of West Gate Park. Whilst it would be technically possible, although expensive, to deviate this route in order to avoid Stage 1 of the Park presently under construction, east of Todd Road, it would require a much more extensive deviation to avoid Stage 2 of the Park, which would seriously interfere with operations of General Motors Holden.

The route involves three new level crossings across public roads south of the Yarra River, whilst there could be serious problems in replacing some of the facilities disturbed by the railway in the area controlled by Telecom, the Department of Minerals and Energy and the State Electricity Commission.

The considerably higher costs of this alternative than any other alternative reflect the much greater interference with land and existing facilities, with consequential higher allowances for land acquisition, compensation and injurious affection.

CONSTRUCTION SPECIFICATIONS

The rail link would be single line, without provision for duplication or electrification. There would be no passing loops.

The track would be 47 kg. rail, laid on concrete sleepers, with provision for the addition of a third rail at 4'-8½" (1.435 m.) gauge should this be required to supplement the initial 5'3" (1.600 m.) gauge. The rails would be welded up continuously.

Information obtained by the Railway Construction and Property Board from the Port of Melbourne Authority indicates the presence of a substantial layer of sand over-lying plastic ground and it is expected that no special measures need be taken to support the railway. A possible exception is in the Port Melbourne tip area, where it is crossed by Route 2, near Todd Road. At this location, replacement of fill by sound material to a suitable depth may be required.

Level crossings at public roads and at the customs gate entrances to the dock would be laid with standard precast concrete slabs. Other entrances to the docks would have no special provision for road surfacing.

As previously outlined, the bridge over the River Yarra would be of "through" type construction to reduce the constructional depth to the greatest possible extent, thus enabling North Wharf Road to be crossed at grade, with an acceptable raising of the road level.

It is expected that this bridge would be founded on deep cylinders, in a similar manner to the adjacent Charles Grimes Bridge, and the estimates have been based on this assumption.

Whilst ground conditions can vary considerably over quite short distances in this particular area, it was not considered justified to sink bores, especially as this would have required a floating platform. Furthermore, records are available of the Charles Grimes Bridge construction very close to the proposed bridge.

Signalling of the rail link would be by telephone control. An allowance has been made in estimates for the provision of the necessary control points at each end of the line, which will be in the Port of Melbourne Authority and Victorian Railways Board areas, respectively.

Level crossing protection for all public road level crossings and for the six customs gates in Lorimer Street will be provided by track circuits, actuating road traffic lights, and these facilities have been allowed for in the estimates.

STANDARD GAUGE CONNECTION

The Ministry of Transport pointed out that its evaluation of alternative rail routes did not extend beyond a track connecting Webb Dock with the 5'3" broad gauge system at Pigott St., which is some 3000 metres distant from the nearest access point to the standard gauge system at Dynon.

According to the Ministry, the preparation of a comprehensive report on the feasibility, cost and economics of providing a standard gauge connection to Dynon would require extensive study, quite apart from other considerations, such as examining concurrently the desirability of providing a standard gauge connection to other areas of the Port of Melbourne, north of the Yarra River.

Subsequent to submitting evidence to the Inquiry, the Ministry advised the Committee that the Bureau of Transport Economics has been authorised to undertake a study of standard gauge rail access to the Ports of Melbourne, Geelong and Brisbane.

Notwithstanding the fact that the Ministry has made no attempt to assess the nature and cost of a standard gauge connection, it nevertheless provided alternative cost figures for a two rail (5'-3") and a three rail (5'3" and 4-8½") link for all alternative routes between Pigott St., north of the Yarra River and the Webb Dock port area.

COST ESTIMATES OF
ALTERNATIVE RAIL ROUTES

Set out in Table 3 - Appendix "E" are detailed cost estimates of the various rail proposals.

It will be noted that the estimated costs of each alternative are as follows:-

Route 1A - Lorimer St..	\$11,869,000
Route 1B - Lorimer St./Todd Rd.	\$11,585,000
Route 1C - Lorimer St./Todd Rd./ Rear of Aircraft Factories	\$11,826,000
Route 2 - Freeway Route	\$13,980,000

The Table shows also that the extra cost of providing a standard gauge connection by the addition of a third rail would be \$230,000 for Route 2, \$280,000 for Route 1B and \$290,000 for both Routes 1A and Route 1C.

BASIS OF COST ESTIMATES

The estimates of cost of the alternative rail proposals are based on approximate quantities and priced at rates current at December, 1980. No allowance has been made for the following contingencies:-

- (a) Future fluctuations and labour and material costs after December, 1980;
- (b) Overtime due to a restricted contract period,
- (c) Overtime to attract labour;
- (d) Negotiated or special forms of contract; or
- (e) 35 hour week.

COST OF RAIL WORKS
IN PORT AREA

The nature and cost of rail works which would be necessary in the Webb Dock area were not closely examined by the Ministry of Transport, as it was felt by it that this was a matter for consideration by the Port of Melbourne Authority, in association with the Victorian Railways Board.

Notwithstanding this, an estimate of \$1,000,000 for rail works was provided by the Ministry of Transport in the context of a cost/benefit study which was included in its submission.

From advice conveyed to the Committee, it appears that the basis for this figure was not obtained by direct reference to the Port of Melbourne Authority but by reference to the Report published in December, 1976 by the Centre for Environmental Studies, University of Melbourne entitled "Land Transport Alternatives for Webb Dock."

In this Report (page 60) it was stated that "Two phases of construction are proposed for the marshalling yards, located north of Webb Dock. The initial phase would involve the construction of three sidings and a spur line serving the ANL berths at an estimated cost for earthworks, rails, fastening and ancillary services of approximating \$0.80m. These facilities would be expanded, if required, in 15 to 20 years time as the second phase of marshalling yard construction." The figure of \$800,000 has been expanded by the Ministry of Transport to \$1,000,000 to allow for inflation.

Discussions held with the Port of Melbourne Authority concerning the accuracy of this figure have established that the Authority believes that a figure of \$1,200,000 would constitute a more accurate representation of the works necessary to establish an operative rail link in late 1984, when No. 5 Webb Dock would be operating.

The Port of Melbourne Authority, when providing the Inquiry with an analysis of the cost savings which would accrue to port users as a result of the provision of a rail link to Webb Dock, included in its estimate of the capital cost of the total rail proposal, an amount of \$4,000,000 for works within the port area, excluding required facilities in the terminal area for which the terminal operator would be responsible for bearing the cost.

It will be apparent that the estimate of \$4,000,000 goes far beyond the rail requirements for 1984/85, when it is projected a railway line would come into operation.

The Committee established that this estimate included provision not only for the cost of the works necessary for a railway line to become functional in 1984/85 but also the cost of the rail works which would be required to complement the forward development plans of the Port of Melbourne Authority over the next two decades, not only for the Fishermens Bend area but also for the Webb Dock area, where the projected future dock complex, with its enlarged capacity and changed configuration, would need to be serviced with rail on the west side of the Dock, as well as the east side.

The Port of Melbourne Authority was adamant that it did not see its responsibility for meeting the cost of rail works extending beyond the boundary of the port area.

EVALUATION OF RAIL ALTERNATIVES

The construction of that section of the track from north of the Yarra River to the point where the rail link would join with the broad gauge system at Pigott St. would have the following effect on existing or proposed facilities along that part of the route:

- (a) The A. J. Wagglan Floating Dock would need to be relocated about 110 metres downstream from its present site.

- (b) The site of the proposed Coronial Services/Forensic Science Laboratory (when constructed) would suffer some disability as a result of vibration and airborne noise emanating from the operation of a railway, whilst access to the site will be affected to a limited degree upon a railway coming into operation.

It must be borne in mind that the existing or proposed facilities affected, as outlined above, are related to that section of the track which is common to all four alternative routes.

The Committee has carefully examined the merits of the four feasible rail alternatives extending from the south of the Yarra River to the boundary of the Webb Dock port area, in the light of all the relevant factors.

The cost of each alternative is re-stated hereunder:

Route 1A - Lorimer St. Extension Route:	\$11,869,000
Route 1B - Lorimer St./Todd Rd. Route:	\$11,585,000
Route 1C - Lorimer St./Todd Rd./Rear of Aircraft Factories:	\$11,826,000
Route 2 - West Gate Freeway Route:	\$13,980,000

It will be appreciated that there is little difference in the cost of Routes 1A, 1B and 1C but the cost of Route 2 is significantly higher.

The Committee was mindful that, apart from the question of cost, the most cogent considerations are:-

- (a) Route 1A is incompatible with the forward development plans of the Port of Melbourne Authority for the Fishermens Bend area.
- (b) Route 1B would conflict with the development of the West Gate Park.
- (c) Route 2 would conflict also with the development of the West Gate Park, whilst there would be serious problems in replacing some of the facilities disturbed by a railway in the area controlled by Telecom, the Department of Minerals and Energy and the State Electricity Commission.

In the light of all the relevant factors, the Committee reached the conclusion that Route 1C (Lorimer St./ Todd Rd./Rear of Aircraft Factories) would be the most suitable alignment for a rail link to follow.

JUSTIFICATION FOR A RAIL LINK

In considering whether a rail link to Webb Dock is justified, the Committee carefully weighed all the evidence submitted by the various parties to the Inquiry on this point.

The Committee found that all the major parties to the Inquiry, with the exception of the Ministry of Transport, strongly supported the concept of a rail link to Webb Dock subject to provisos, in some cases, as to how a rail link might be funded.

Economic Considerations

The establishment of port facilities at Webb Dock has been closely linked with the development of coastal and overseas shipping services by the Australian National Line and its consortium partners.

Serious concern was expressed to the Inquiry by the Australian National Line about the effect of the absence of a rail link to Webb Dock on the viability of the Company's shipping operations.

The Company pointed out that it has been labouring under a long-standing trading disability, compared with other shipping companies operating from other areas of the Port of Melbourne, which are serviced with rail, by virtue of the necessity for the Company to pay road cartage charges on rail containers between Webb Dock and railheads such as Freightbases Depot, Montague rail-yard, Dynon rail-yard, Conrail Park and, to a lesser extent, the South Dynon and Melbourne Goods rail-yards. At the Freightbases Depot and Conrail Park, transfer to rail normally involves two lifts.

Table 4 - Appendix "F" shows the charges met by the Australian National Line in having containers conveyed by road between Webb Dock and the main rail-heads concerned.

Based on the commercial cartage and lifting rates currently charged and the distribution of containers between rail-heads, the average cost to the Australian National Line of rail container cartage and lifting is approximately \$50 per container in July 1981 prices.

With the current throughput of railed containers through Webb Dock being variously estimated as being between 10,000 to 12,000 containers, this would represent an added annual cost of between \$500,000 to \$600,000.

By the time No. 5 Webb Dock is completed in late 1982, the added cost to the Australian National Line and other users of the Webb Dock complex would be of the order of \$740,000 annually, with the Australian National Line, being the major user, having to bear the greatest share of this financial burden.

Whilst it must be accepted that the provision of a rail link to Webb Dock would confer significant savings on the Australian National Line and other port users, the question as to whether a rail connection would be an economically viable proposition insofar as the Victorian Railways Board is concerned is open to grave doubt, particularly in the early years of its operation, when the throughput would be at a relatively low level compared with 20 years hence when railed container traffic through the facility is expected to increase about sixfold.

The Ministry of Transport provided an economic evaluation of the following three rail alternatives, viz., Lorimer St. Extension route, Lorimer St./Todd Rd. route and the West Gate Freeway route.

The Lorimer St./Todd Rd./Rear of Aircraft Factories' route was not included in the economic evaluation, as this route was not identified until a late stage of the preparation of the Ministry's submission, when it became evident that both the Lorimer St./Todd Rd. Route and the West Gate Freeway Route would interfere with the development of West Gate Park.

The Ministry's evaluation assumed that the cost of the capital would be 10%, the life of the investment 20 years and the cost of rail works within the Webb Dock port area, \$1,000,000.

The evaluation did not have regard to sociological and economic factors, such as reduced air pollution, noise and vibration, lower accident rate, lower vehicle operating and time costs of other road users and increased property values. These factors were not considered to be quantifiable within the time span of the study.

According to the Ministry, the Lorimer St./ Todd Rd. route, under the best possible assumptions, gives a benefit/cost ratio of 0.57 and an internal rate of return of 4.68%. In the view of the Committee, it would be reasonable to assume that the Lorimer St./ Todd Rd./Rear of Aircraft Factories Route would return somewhat similar figures on the basis of the Ministry's calculations.

The Ministry averred that, on a community resource assessment, the proposal cannot be justified unless the non-quantifiable factors are sufficient to lift the benefit/cost ratio in excess of one. It was adamant that the direct financial return on investment to the State for the proposed rail link would be highly negative, because Vic Rail's financial position would worsen with the construction of the Webb Dock rail link, even if it does not become directly responsible for servicing the capital outlays required.

Presumably, because of economic factors as calculated by Vic Rail, the Ministry of Transport was not disposed to make a recommendation to construct a rail link to Webb Dock.

The conclusions reached by the Ministry of Transport on the economic viability of a Webb Dock railway were disputed by the Port of Melbourne Authority in submitting rebuttal evidence.

The Authority considered that, on the basis of calculations made by it, the benefit cost ratio is very likely to be greater than 1, possibly as high as 1.59, contrary to the Ministry's calculations, which showed a maximum benefit/cost ratio of 0.57.

The premises on which the Port of Melbourne Authority based its conclusions were substantially different from those adopted by Vic Rail.

For example, whilst the Ministry of Transport assumed the cost of servicing capital to be 10% per annum, the Port of Melbourne Authority assumed the cost of capital to be within a range of options varying from between 4% and 8%. The Authority arrived at this conclusion by initially adopting a higher primary rate for servicing capital, viz., 15%, and then discounting it by various possible inflation rates to allow for the fact that the cost savings are continually increasing in money terms over the life of the project.

Another significant area of dispute was the investment life of the project, where the Port of Melbourne Authority felt that a span of 30 years rather than 20 years would be a more realistic assessment of its life.

The Committee has carefully weighed all the evidence tendered to the Inquiry on economic aspects of a rail link and it has reached the conclusion that the economic viability of such a link, if totally funded by the Victorian Railways Board, would be decidedly suspect, particularly in the early years of its operation, when throughput would be comparatively low compared with say, the year 2000.

It would naturally follow that, if economic aspects were the only criteria, then the Committee would find it very difficult to sustain a recommendation involving the provision of a rail link.

However, the terms of reference for the Inquiry require the Committee to have regard not only to economic factors but also to social, environmental and technical aspects and it becomes necessary, therefore, for the Committee to examine these factors.

Social and Environmental Aspects

It was found by the Committee that the passage of heavy trucks to and from Webb Dock has a deleterious effect on residential communities with homes abutting main access roads to Webb Dock, such as Williamstown Rd. in particular, The Boulevard, Beach Rd., Beaconsfield Parade and other main access roads in the Port Melbourne/South Melbourne area.

The Committee believes that the strains imposed on adjacent urban communities have not, as yet, reached intolerable proportions. For example, taking Williamstown Road, the key access road as a yardstick, traffic flows per 12 hour day, between Salmon St. and Graham St., have decreased from 15,000 vehicles in 1969, when the Williamstown Ferry ceased to operate, to 11,000 vehicles in 1980. Very little change has occurred in the number of commercial vehicles over that same period, with the number involved remaining static at about 2500 per 12 hour day.

However, the staged development of Webb Dock to the year 2000 and beyond into a 10 berth complex will have a substantial impact on the throughput of cargo through Webb Dock facilities and associated commercial traffic to and from the Dock.

This is reflected by the fact that the current throughput of containers is expected to rise from 114,500 containers in 1980/81 to 154,000 containers in 1985/86, to 196,800 containers in 1990/91, to 255,900 containers in 1995/96 and to 354,000 containers in 2000/01.

During that 20 year period, non-containerised cargo is expected to increase from 1,110,000 revenue tonnes in 1980/81 to 1,586,000 revenue tonnes in 2000/01.

With the progressive increase in cargo passing through Webb Dock, it must be expected that commercial traffic on the major access roads will increase in appropriate proportions, thus throwing increasing strains on urban communities through which the traffic passes.

Accepting the Port of Melbourne Authority's figures on container throughput, the 10,001 containers or some 9% of the current throughput, which are currently capable of being carried by rail annually, would increase to 56,700 railed containers annually or some 16% of throughput in the year 2000, should a rail link to Webb Dock be constructed.

It will be appreciated from these figures that, should a rail link be constructed, the proportion of all Webb Dock cargo traffic that it would attract would be on an increasing scale, although it is important to keep in mind that, even in the year 2000, it would represent only 16% of the overall Webb Dock traffic on the Port of Melbourne Authority's estimates.

The Committee is conscious that this figure may be a little on the conservative side, as the Ministry of Transport projects a figure of 67,500 rail containers for the year 2000, which represents slightly more than 19% of all Webb Dock container traffic. The Ministry's higher projection relies on the assumption that the provision of a rail link to Webb Dock will generate added cargo growth through the facility.

All projections of future railed container traffic depend heavily on imports and exports from Adelaide continuing to be shipped through the Port of Melbourne.

With the establishment of containerised cargo handling facilities at Adelaide, ships proceeding from Melbourne to the United Kingdom and Europe in a westerly direction may find it expedient to call at Adelaide, if a sufficient container exchange is assured. This is, in fact, already happening according to information conveyed to the Committee.

However, this development should have no immediate effect on Webb Dock container trade, as the shipping services currently operated from Webb Dock facilities by the Australian National Line and its consortium partners are connected with the operation of ships involved in Asian trades, which are normally routed around the east coast of Australia.

The Committee has been led to believe that the possibility of shipping companies two-porting ships engaged in Asian trades in both Adelaide and Melbourne is not likely in the foreseeable future, in view of the added cost associated with a ship steaming from Melbourne to Adelaide and return.

In the circumstances, the Committee finds it difficult to accept that the development of the Port of Adelaide as a container port will erode present or future Webb Dock cargo traffic capable of being carried by rail. However, ultimately, the volume of cargo passing through the Port of Melbourne as a whole could be affected to some degree, as could the carriage of freight by Vic Rail between Adelaide and Melbourne.

With transport economics favouring road transportation for short-haul work and the major Victorian market of Melbourne falling within this pattern, the use of a rail link would have limitations both now and at the turn of the century.

Notwithstanding this, the Committee believes that any initiative which would result in a significant diversion of heavy road transport from major access roads to Webb Dock, which also serve residential communities, cannot be lightly dismissed.

Other Considerations

Although no substantive evidence was submitted on this subject, the Committee does not discard the possibility of an operating railway line connecting with the major rail network north of the Yarra River being attractive to sections of existing industry in the Fishermens Bend area or to future industries which might be established in that area.

The Committee was mindful also of the following considerations in its overall assessment of the desirability of providing a rail connection to Webb Dock.

- (1) With a satisfactory rail link being an essential ingredient to the efficient operation of any major port area, the rapidly expanding Webb Dock is unlikely to reach its full potential as a major dock complex within the Port of Melbourne until this deficiency is remedied.
- (2) The diversion of a significant part of Webb Dock cargo to the rail system, with its comparative fuel efficiency, as against less fuel efficient road transport, will result in a transport link in harmony with the national aim of fuel conservation.
- (3) A rail link will offer a least cost transport link from the seaboard to country areas and interstate and will stimulate the growth in trade by inter-modal transport in the form of sea and rail between, say, Tasmania and South Australia and Tasmania and New South Wales.
- (4) The provision of a dual gauge connection, allowing for standard gauge as well as broad gauge travel, would be in the national interest, in as much as it would add flexibility to the rail system which would assist in the more efficient interchange of essential commodities between the States or the Commonwealth in emergency or disaster situations.
- (5) Where rail and road transport charges are of a similar order, exporters and importers and other port users would be offered a choice of two different modes of transport which is not currently available.
- (6) The establishment of a rail link to Webb Dock would strengthen the position of the Port of Melbourne Authority and indeed the State of Victoria to withstand the challenge from South Australia to capture a share of the container trade which is currently channelled through the Port of Melbourne.

RECOMMENDATION

Notwithstanding doubts held by the Committee as to the economic viability of a rail link to Webb Dock, particularly if Victorian Railways Board is saddled with the sole responsibility of financing the proposal, the Committee believes that sociological, environmental and other considerations outweigh economic aspects in the overall assessment.

The Committee recommends, therefore, that a rail link be constructed to Webb Dock along Route 1C, i.e., Lorimer St/Todd Rd/rear of sites occupied by the Government Aircraft Factories and the Commonwealth Aircraft Corporation, in accordance with the specifications laid down by the Railway Construction and Property Board.

In the view of the Committee, provision should be made in the design and construction for the addition of a third rail at 4-8½" standard gauge to supplement the initial 5-3" broad gauge.

Because of the previously expressed reservations held by the Committee concerning the Victorian Railway Board's ability to operate the railway on a payable basis if made solely responsible for its funding, the Committee recommends that the capital cost of the provision of Route 1C (estimated by the Railway Construction and Property Board to be \$11,826,000) together with the cost of the rail works necessary within the boundaries of the port area (estimated by the Port of Melbourne Authority to be \$4,000,000), making a grand total of \$15,826,000, be shared, in equal one-third proportions, between (a) the State Government (b) Victorian Railways Board and (c) Port of Melbourne Authority.

The Committee formulated this proposal, after first ascertaining from the Honourable R.J. Hunt, M.P., Federal Minister for Transport, that, as the National Railway Network (Financial Assistance) Act, 1979 does not make provision for the construction of new railway lines, it would not be possible to provide assistance under this legislation for the construction of a rail link to Webb Dock.

The cost of rail works within the port area does not include, of course, the cost of works within the ANL terminal area, which would be the responsibility of ANL as the terminal operator.

It should be borne in mind that the initial cost of the railway would be nearer to \$12,826,000, as the rail connection, if effected in 1984/85 as visualised, would entail rail works within the port area of \$1,000,000 or slightly more, whereas the balance of the cost of works within the port area, viz., \$3,000,000 would be spread over a long period of time to complement the Port of Melbourne Authority's forward development plans for Webb Dock and the Fishermens Bend area over the next two decades.

In joining the Port of Melbourne Authority to the financial proposal recommended, the Committee was mindful that the decision of the Authority to establish a port complex at a location which is not serviced with rail, carries with it some measure of responsibility to share in the cost of a rail connection to the port area.

The Committee was also conscious that the alignment of that part of the railway which is routed to the rear of the premises occupied by the Commonwealth Aircraft Corporation and the Government Aircraft Factories figures prominently in the forward development plans of the Authority as being an area in which future port development could occur, should circumstances arise which would permit the relocation of the aircraft factories to another site.

Mr. J. Lade, Vic Rail, in presenting evidence to the Inquiry, estimated that the Victorian Railways Board would have to charge an extra \$60.00 per container passing through Webb Dock, over and above the normal rail freight charges applicable to other areas of the port, in order to meet the annual cost of servicing the capital outlay required to fund the necessary rail works. This estimate was made on the basis of a total of 12,000 railed containers currently passing through Webb Dock and represents a loss of \$720,000.

The evidence tendered by Mr. Lade to the Inquiry was presumably submitted on the basis of Vic Rail meeting the full cost of a rail connection and the Committee's recommendation to relieve Vic Rail of a substantial part of this financial obligation must give cause to view Mr. Lade's comments in a vastly different light.

From confidential evidence given to the Inquiry and from other enquiries made from road haulage sources, the differential between the cost of carrying a container between Melbourne and Adelaide by rail, as compared with road, very much favours rail transport.

With the present and future passage of railed containers through Webb Dock being dependent, to a large degree, upon the Adelaide trade, there would seem to be scope for Vic Rail to increase rail freight charges between Melbourne and Adelaide to a higher level, if necessary, so that the cost of operating a Webb Dock railway, including the cost of servicing its share of the capital outlay, would be balanced by equivalent revenue.

In making these comments, the Committee is aware that the establishment of a container port at Adelaide does not currently present a threat to Webb Dock overseas container traffic, which is linked to shipping services routed around the east coast of Australia to Asian destinations.

Alternatively, Vic Rail could consider imposing a levy or increased charges on all containers railed through the Port of Melbourne, so that sufficient additional revenue would be generated to meet any shortfall in the cost of operating a Webb Dock railway. This, in effect, would mean spreading the cost of Vic Rail's commitment amongst all users of port facilities within the Port of Melbourne, who avail themselves of rail facilities to carry containers to and from that port.

The Committee takes the view that, whatever course of action is adopted, is a matter for resolution by the Victorian Railways Board.

In the light of the oft-repeated advocacy of overseas shipping companies, as represented by the Australian Chamber of Shipping, for fewer ports and the centralisation of trade in those ports, together with the Chamber's strong support for a rail link to Webb Dock in the context of the current Inquiry, the Committee is surprised to learn that the recently established container port in Adelaide is starting to attract some measure of support from overseas shipping companies.

ROAD ACCESS TO WEBB DOCK

THE ROAD NETWORK

In the Port of Melbourne area the arterial network comprises Williamstown Road/Normanby Road (CRB declared Main Road), Lorimer Street, Todd Road, Graham Street, Ingles Street, Pickles Street, Bay Street, Salmon Street and The Boulevard/Beach Road. The major arterial roads in Port Melbourne generally have 30m. wide reservations.

Williamstown Road currently provides the most direct route to Webb Dock, as well as being an essential link for distributing traffic throughout the Port Melbourne area and interconnecting it with areas to the north, west and east.

In the longer term, the West Gate Freeway will incorporate some of this role in the overall network and will also provide the most direct route between Kings Way and the Charles Grimes and West Gate Bridges.

In the interim, an advisory route has been developed to encourage trucks to avoid using residential and shopping streets, when going to or from the two bridges.

The truck advisory route follows Lorimer Street, Normanby Road, Clarendon Street and Market Street/York Street.

To cater for special permit vehicles, there is also an Over-Dimensional Truck Route through the area. This route follows the Charles Grimes Bridge, Lorimer Street, Ingles Street, Pickles Street and Beaconsfield Parade.

It is expected that construction of the West Gate Freeway to Kings Way will be completed by 1986.

EXPECTED ROAD TRAFFIC GROWTH

The Ministry of Transport tendered evidence on future road traffic growth to Webb Dock on the projection that, between 1979/80 and 2000/01, cargo in containers passing through the Dock would increase from 114,200 annually to 354,600 annually, whilst non-containerised cargo would increase from 1,198,000 revenue tonnes to 1,586,000 revenue tonnes. The growth in trade would be associated mainly with overseas containers.

It was found by the Ministry that, for every 100 overseas containers passing through Webb Dock, 115 trucks enter or leave the terminal. The corresponding figures for coastal trade are 145 trucks for every 100 containers.

The average payload of a vehicle carrying non-containerised cargo was estimated to be 10 tonnes. This may fluctuate significantly, depending on the prevailing economic climate and competition in the road transport industry.

An operational period of 250 days per year was assumed in order to estimate the average daily number of trucks required to transport the predicted number of containers through Webb Dock.

On the basis of estimated throughputs, the Ministry calculated that Webb Dock truck traffic would increase from an average 1060 trips per day in 1979/80 to an average 1750 trips per day in the year 2000/01, assuming a rail link was then in existence and 2020 trips per day, if no rail link was then operating.

If no alternative road routes were to be provided and the maximum expected increase in cargo movements occurred, the Ministry estimated that there would be an average increase of 63 per cent in commercial vehicle volumes on Williamstown Road, west of Todd Road, over the next 20 years provided that a rail link was then operating.

The increase in traffic due to Webb Dock development would also result in an average increase of 27 per cent in commercial vehicle traffic in Williamstown Road west of Graham Street, provided that a rail link was then operating and the existing distribution of commercial vehicle traffic from the Dock was maintained.

The corresponding increases in commercial vehicle volumes, if no rail link was then operating, would be 83 per cent and 36 per cent, respectively.

Based on the above estimates of future Webb Dock cargo movements, it is expected that the volume of traffic, both cars and trucks, on Williamstown Road, west of Todd Road, will increase from a current average volume of approximately 3,200 vehicles per 12 hour day to between 5,700 and 6,100 vehicles per 12 hour day, depending on whether or not a rail link is provided to the Webb Dock area.

The above estimates of future traffic on Williamstown Road do not take into account any traffic generated by future industrial development on vacant land in the Fishermens Bend area.

ALTERNATIVE ROAD ACCESS PROPOSALS

The alternative road proposals for access to Webb Dock, which are depicted in Appendix "B", are set out hereunder:

- (1) Williamstown Road;
- (2) Lorimer Street Extension;
- (3) Todd Road/Lorimer Street;
- (4) Plummer Street (immediately north of J.L. Murphy Reserve, between Williamstown Road and the West Gate Freeway);
- (5) West Gate Freeway Connection;

Williamstown Road (Cost - Nil)

Williamstown Road has been a CRB declared Main Road since September 1960. The existing road reserve is 1.5 chain or approximately 30m in width.

It provides access to the Port Melbourne/South Melbourne area, as well as to the West Gate Freeway, via the Graham Street interchange, which will provide for both easterly and westerly movements, when the West Gate Freeway (South Melbourne section) is completed.

Asphalt re-sheeting along the entire length of Williamstown Road, with abutting residential land use, has recently been completed, as part of the normal upgrading of main roads using Main Road funds.

According to the Country Roads Board, Williamstown Road has adequate capability to cater for all foreseeable traffic needs, including any increase in trucks transporting cargo to and from Webb Dock resulting from greater use of the dock facilities, even if no rail link is provided.

The present noise environment alongside Williamstown Road is typical for an arterial road, with L10 (18 hr) index being 70-75 dB(A). There are many kilometres of heavily trafficked arterial roads in Melbourne where the index value ranges from 75 dB(A) to in excess of 80 dB(A).

The Ministry of Transport indicated to the Inquiry that there are several consequences and problems arising out of proposals to divert traffic from Williamstown Road.

They are in brief:-

- (a) The community in general would incur increased freight costs, because of the longer lengths and increased inconvenience of alternative routes.

- (b) Williamstown Road would still be required to serve an arterial road function for abutting residential properties to the south and industrial development to the north.
- (c) It would be difficult to make longer alternative routes more attractive to commercial traffic than Williamstown Road; especially for traffic travelling between Webb Dock and the east.
- (d) Diversion of traffic to another route could necessitate reconstruction of that route earlier than anticipated, due to increased truck volumes, whereas it is unlikely that the Country Roads Board would be able to finance any additional major expenditure in this area from current funds for many years to come.

The Ministry of Transport acknowledged that there may be some justification for diverting commercial traffic from Williamstown Road during the night. It was suggested that a ban on trucks at night time and at week-ends, such as is currently being applied in Beaconsfield Parade, could overcome this problem.

The Ministry averred that it may be possible to assist the application of such restrictions by taking some action to ensure that the Webb Dock Terminal was open to delivery and pick up of cargo only during non-restricted hours.

In the view of the Committee, the concept of a major port complex being required to conduct cargo handling operations during restricted hours would be neither in keeping with efficient port management nor in the best interests of port users and the community at large.

The Port Melbourne City Council vigorously opposed the continued use of Williamstown Road as the major access route to Webb Dock, on the grounds of the amenity of the substantial residential areas abutting the south wide of Williamstown Road being impaired by the passage of heavy nuisance vehicles to and from the Dock.

The Council did not dispute that Williamstown Road is needed in the short term as a route for heavy vehicles, but maintained that this does not preclude its management being planned to revert to a residential route in accordance with Council's active policy.

It pointed out that the older residential development, State Savings Bank estate, the Housing Commission scheme, west of Howe Parade, and the Garden City residential estate all clearly preceded the declaration of Williamstown Road as a Main Road in 1960 and the construction of Webb Dock.

According to the Council, the Ministry is only paying "lip-service" to its suggestion that restraints be placed on heavy trucks at night-time and week-ends as, under questioning by the Committee, representatives of the Ministry indicated that the practicability of restraints might be "somewhat unreasonable".

The Committee found that transport depots located within the municipality, some of which have links with Webb Dock, are generators of heavy vehicular traffic.

In the Committee's view, the relocation of these depots to an industrial zone, either within or close to the boundary of the port area, is a proposal which should be investigated.

Todd Road/Lorimer Street (Estimated Cost -
\$1.3 million)

This alternative involves the closure of or restrictions on the use of Williamstown Road immediately west of Todd Rd. and the construction of a link between Todd Rd and Williamstown Rd., so that the main access to Webb Dock is from the north via Todd Rd and Lorimer Street.

Whilst this route offers the least expensive construction costs of the proposals to divert traffic from Williamstown Road, there are considerable associated time and distance penalties, particularly for vehicles travelling to the south-eastern suburbs.

This alternative would be compatible with the Port of Melbourne Authority's forward development plans for the Fishermens Bend area, upstream of West Gate Bridge, and would not inhibit the development of West Gate Park.

Lorimer Street Extension (Estimated Cost -
\$2.2 million)

In this proposal, Lorimer Street would be extended along the Yarra River to Williamstown Road, west of the Webb Dock terminal.

This proposal serves virtually the same function as the Todd Road/Lorimer Street route, with a considerable increase in cost and longer route distance.

Extensive areas of replacement long term parking would need to be provided also for the industrial workers currently parking along Lorimer Street. The car parking requirements could also be a problem, if a rail route were to be located along this corridor.

Truck traffic could only be persuaded to use the Lorimer Street Extension route by prohibiting the use of the direct access routes, via Williamstown Road and The Boulevard, by means of truck bans and/or load limits or by the closure of road access between these latter roads and the dock area.

Lorimer Street is currently constructed to arterial road standard (sealed width of 45 feet), between the Charles Grimes Bridge and Ingles Street. West of Ingles Street to a point just north of the West Gate Bridge, it is sealed to varying widths of up to 30 feet.

This alternative would be incompatible with the Port of Melbourne Authority's forward development plans for the Fishermens Bend area upstream of West Gate Bridge.

Plummer Street (Estimated cost - \$3.1 million)

An alternative route using Plummer Street and Fennell Street was proposed by the Port Melbourne City Council. However, there are problems in providing a suitable connection at the eastern end of this route, in the vicinity of Ingles Street and Montague Street.

An alternative route would be via Plummer Street and Bridge Street but this would not divert traffic from the whole length of Williamstown Road and would increase the travel distance.

As well as the cost involved in upgrading the existing streets to develop a route incorporating Plummer St., it would be difficult to provide sufficient long term off-street parking to compensate for the existing extensive on-street parking.

West Gate Freeway Connection (Estimated Cost - \$3.0 million)

It has been suggested that a direct connection to the West Gate Freeway could be made in the vicinity of the toll plazas.

One way to achieve this with least disruption to toll plaza operations and safety could be to dedicate or alter the outside toll booth in each direction for traffic travelling on the Freeway between the areas to the east and Webb Dock.

Between the toll booths and Todd Road or Cook Street, new one way roads would need to be constructed but the cost of constructing new roads at this location would be high, because of the extremely poor foundation conditions.

Moreover, Webb Dock traffic coming from the west across the West Gate Bridge would still need to use the Graham Street interchange to get on and off the Freeway.

The Committee is mindful that, even with this arrangement, there would be continuing operational problems, especially arising out of the enforced weaving (crossing) manoeuvres between all Webb Dock traffic and all freeway traffic using the Graham Street Interchange. These weaving manoeuvres would have to take place simultaneously, with traffic merging, diverging and changing speeds on the eastern side of the toll plazas.

This would give rise to a potentially hazardous situation, which would be further aggravated because of the relatively slow acceleration and deceleration rates of loaded trucks.

Because of the operational and safety aspects and the high cost of providing the new road connections, the Country Roads Board and the West Gate Bridge Authority do not favour the provision of a direct connection to the West Gate Freeway.

The adoption of this route would be amenable to the Port Melbourne City Council, as it would by-pass the residential areas abutting Williamstown Road, which represent the Council's main area of concern.

COSTS OF ROAD ALTERNATIVES

The estimated costs, which are based on 1981 prices, are qualified by the following information:

- (a) all estimates are based upon very preliminary information and would be subject to variation as a result of detailed design and site information;

- (b) all alternatives are based upon providing suitable pavement design to accommodate future predicted traffic by the year 2000; and
- (c) an allowance, viz. \$276,000, has been made to provide alternative parking to replace that lost in Lorimer Street for the Lorimer Street Extension alternative.

VIEWS OF INTERESTED PARTIES

There was a lack of unanimity amongst interested parties to the Inquiry as to which of the alternative routes should be developed, taking into account economic, social, environmental and technical aspects.

The views of the interested parties on the various alternatives and related matters, as presented in sworn evidence or written submissions are set out hereunder, in brief:

The Ministry of Transport

The Ministry of Transport viewed the alternative road proposals largely in the light of the adequacy of the existing road network, in an operational sense, to meet present and future traffic needs, and having regard to economic considerations, which reflected the Country Roads Board's financial problems in developing and maintaining the State's arterial road system:

The Ministry expressed the following views:

- (a) The existing arterial road network, together with the West Gate Freeway now under construction, is considered to be generally adequate for present and future road transport requirements in the Port Melbourne-South Melbourne area.
- (b) The major access road to Webb Dock, viz., Williamstown Road, and the adjacent section of the arterial road network, have adequate capability to cater for present and future traffic needs, including any additional traffic likely to result from increased use of Webb Dock facilities, with or without a rail link to the dock.

For example, Williamstown Road, which is currently carrying some 11,000 vehicles per day east of Salmon Street (the most heavily trafficked section) should be expected to handle about 25,000 vehicles per day before being overloaded as an arterial road.

- (c) Significant relief could be afforded to people living in the residential areas south of Williamstown Rd by traffic restraining measures, such as the imposition of bans on the passage of heavy vehicles in Williamstown Rd at night time and weekends, when such vehicles could use Todd Rd. and Lorimer St. as a reasonable alternative route.
- (d) With the long term development of the area west of Todd Road, it may be desirable ultimately to give further consideration to the development of improved road access to Webb Dock by the southerly extension of Lorimer Street or an improved connection from Todd Road.
- (e) While the provision of a direct connection to West Gate Freeway, as has been suggested, could provide for traffic movements between Webb Dock and the area to the east, the Country Roads Board does not favour such provision because of the high costs involved, the poor operational and safety aspects and the connection would not provide any significant improvement for Webb Dock traffic wishing to use the West Gate Bridge.

Australian National Line

The Australian National Line was non-committal on the question of the various road alternatives. However, it pointed out that:-

- (a) Even when a rail connection is established, there will still be a considerable volume of container and other movement by road.

Therefore, it is not a matter of choosing either road or rail but a matter of establishing a rail connection and, at the same time, consolidating and improving road access.

- (b) In upgrading the road network, planning must take into account the diverse nature of road movement. Whilst it may be expedient to channel semi trailers and other large vehicles onto the West Gate Bridge or other major freeways, the way must be left open for smaller, individual loads to use normal through roads without undue hindrance.

Port of Melbourne Authority

The Port of Melbourne Authority was similarly non-committal about road alternatives, the thrust of its submission being directed towards the advocacy of a rail link. However, the Authority submitted that one of the road alternatives, viz., the Lorimer St. Extension route is incompatible with its forward development plans for the Fishermens Bend area.

Port Melbourne City Council

The Council favoured direct connection to West Gate Freeway or a route along Plummer Street. It was bitterly opposed to more intensive use of Williamstown Road as the major access road to Webb Dock.

Melbourne City Council

The Council advocated that additional consideration be given to improving road access to Webb Dock and the port area in general, over a larger area. In particular, ways of providing better access from the north should be investigated, such as the proposal to link the Tullamarine Freeway and the Lower Yarra Freeway.

Ministry of Housing

The Ministry expressed its opposition to any road (or rail) proposals which would:-

- (a) maintain the level of traffic noise being experienced in Garden City; or

- (b) limit housing opportunities on the south side of the Yarra River between Clarendon Street and the Charles Grimes Bridge.

Sea Pak Transport Services

This Company, which has transport terminals on the east and west corners of Swanton Street with Williamstown Road, was concerned that any road or rail proposals should not infringe on its access to major current routes such as Beach Street, Beaconsfield Parade, West Gate Freeway, Footscray Road, Montague Street, Normanby Road and Williamstown Road (east of Todd Road).

The Urban Freight Group

This Group relied for its submission on its report "Frayed Nerves at Freight Centres", which supported its argument that the provision of a direct rail link to Webb Dock is desirable and necessary, in association with the development of outer suburban rail to freight centres and the introduction of measures to lessen the impact of heavy freight transport traffic on inner and middle suburban communities.

The report specifically recommended the construction of a rail link to Webb Dock on the Lorimer Street alignment, with a view to relieving road congestion and serving neighbouring industrial premises.

The Group recommended that the under-utilised Lorimer Street route should be fully developed along its whole length to provide the major road access to Webb Dock. This would prevent the build-up of conflict which access via Beaconsfield Parade and Williamstown Road will generate with local communities.

Victorian Road Transport Association

The Association recommended that, in the short term, direct road access from Lorimer Street, to Webb Dock be constructed and the majority of industrial traffic would then follow a level along Lorimer Street, directly entering Webb Dock.

Australian Federated Union of Locomotive Engineers

The Union recommended that a rail link be provided to service the Webb Dock terminal. The alternative is an increase in road traffic, with all the well known environmental consequences.

It advocated that ANL and other beneficiaries of a direct rail link bear a substantial portion of the capital cost; or alternatively, the Port of Melbourne Authority which could, in turn, recoup the cost from increased berth occupancy charges.

West Gate Bridge Authority

The Authority totally opposed the alternative of connecting Webb Dock to the West Gate Freeway by means of access ramps in the vicinity of the Toll Plaza, on the grounds that it would severely interfere with traffic flows on the Freeway, with associated operational and safety problems.

The Authority suggested that the under-utilised Lorimer Street be developed to its fullest extent to provide the major road access to Webb Dock.

Department of Crown Lands and Survey

The Department expressed concern that road links should utilise the existing road patterns and rail links should follow existing roadways as closely as possible so that the least disturbance is caused to adjoining Crown leaseholds.

State Electricity Commission

The Commission averred that its main interest in the Inquiry is the rail transport of high loads, with the possible damage to overhead lines, and road access for cumbersome loads between Melbourne wharves and the Latrobe Valley.

It considered that future planning for road access for cumbersome loads between the Port of Melbourne wharves and a planned route to Princes Highway East should provide for an adequate height clearance of 5.5 metres, whilst construction of kerbings at road intersections should provide for an outer wheel path radius of 35 metres, an inner wheel path radius of 25 metres and clearance for a beam cut in radius of 15 metres.

Ministry of Conservation

The Ministry provided the Inquiry with a copy of its Assessment of Land Transport Alternatives to Webb Dock, using the Report prepared by the Centre for Environmental Studies, University of Melbourne, as the base document.

The Ministry's assessment favoured a direct link to the West Gate Freeway, provided doubts raised by the Country Roads Board and the West Gate Bridge Authority concerning operating and safety problems could be resolved.

EVLUATION OF ROAD ALTERNATIVES

The Committee considered the advantages and disadvantages of the various feasible road alternatives, in the light of its recommendation that a rail link be constructed to Webb Dock along Route 1C (Lorimer St/Todd Rd/rear of Aircraft Factories) and the environmental and sociological benefits which would accrue therefrom, in achieving a significant diversion of heavy road traffic from Williamstown Road and other major roads, which constitute the main access roads to Webb Dock.

The various road alternatives were appraised also in the light of the Committee's proposal to relocate transport depots at present operating from urban areas of the City of Port Melbourne to an industrial zone, either within or close to the boundaries of the port area, with the object of achieving a reduction in the level of heavy commercial vehicles on major access roads to Webb Dock, which also serve residential development.

In addition, the Committee had regard to the relative costs of the various alternatives, where it found that the costs of the four alternative road links to Webb Dock, other than the present road network, range from between \$1.3 million (the Todd Rd/Lorimer St Route) to \$3.1 million (the Plummer St. Route), whereas the present road network, with its capacity to meet present and future traffic demands is a no-cost alternative.

In examining the merits of the various alternatives, the Committee was mindful that the road link involving connection to the West Gate Freeway would be attended by serious operational and safety problems, associated with heavy Webb Dock traffic interfering with traffic flows on the Freeway, whilst the Lorimer St. Extension Route conflicts with the forward development plans of the Port of Melbourne Authority and would create the need to provide extensive areas of car parking spaces to replace that lost as a result of road construction.

CONCLUSION

In the opinion of the Committee, the weight of the evidence does not support the provision of an alternative road link to the existing road network at the present time, provided action is put in hand to construct a rail link to Webb Dock as soon as possible.

Notwithstanding this, the Committee shares the concern of the Port Melbourne City Council about the impact of the build-up of heavy commercial traffic, in the longer term, on residential communities served by major access roads to Webb Dock such as Williamstown Rd., The Boulevard and Beach St.

In the Committee's view, the Country Roads Board should plan for the future development of the Lorimer St./Todd Rd. Route, or a modification of this route, in the longer term, when the further development of Webb Dock will cause the existing major access routes to become more heavily trafficked to the further detriment of residential communities adjacent to these routes.

A modification of the Lorimer St./Todd Rd. Route, which has not been costed by the Ministry of Transport, was introduced, at a late stage of the Inquiry, by the Port of Melbourne Authority when presenting rebuttal evidence.

This route, which is compatible with the long-range plans of the Authority for the development of the Webb Dock and Fishermens Bend areas, would follow a similar route to that recommended by the Committee as the most suitable alignment for a rail route, viz., Lorimer St./Todd Rd./rear of Aircraft Factories.

The Committee recommends that, pending the development of an alternative route to the existing road network, the Country Roads Board continue to monitor traffic levels on major access roads to Webb Dock, to ensure that the interests of residents living in close proximity to these routes are safeguarded.

The Committee does not feel disposed to recommend, at the present time, the introduction of regulatory measures on the passage of heavy vehicles to and from Webb Dock, such as bans on the operation of heavy vehicles at night-time and weekends, especially as it holds doubts as to the efficacy of such measures, in practice.

It is also conscious that there would be an awareness amongst municipal councils of the options available to them under legislative processes, should the levels of road traffic become so heavy that intolerable strains would be placed on neighbouring residential communities.

LIST OF WITNESSES

Name	Occupation and Address	Examined at	Transcript Page No.
Barnard, J. McA.	Secretary; Vic. State Committee, Australian Chamber of Shipping, Melbourne	Melbourne	147
Bayley, J. M.	Civil Engineer; Deputy Director of Transport, Ministry of Transport, Highton	"	2
Bryans, T. H.	Director Operations; Australian National Line, Melbourne	"	115, 327
Canning, J.B.	Research & Development Manager; Sea Pak Transport Services, Melbourne	"	224
Comben, G.M.	General Manager/ Corporate Secretary, West Gate Bridge Authority, Werribee	"	282, 323
Clarke, J.S.	Company Director; representing Victorian Road Transport Association, Anglesea	"	258
Edwards, G.L.	Electrical Fitter; Councillor, City of Port Melbourne, Melbourne	"	166, 351
Eriksson, S.C.B.	Civil Engineer; Acting Road Planning Engineer, Country Roads Board, Melbourne	"	2, 387

Name	Occupation and Address	Examined at	Transcript Page No.
Herington, A.D.	Community Organiser; Urban Freight Group, Melbourne	Melbourne	237
Jordan, C.L.	Civil Engineer; Chief Planner, Port of Melbourne Authority, Melbourne	"	66, 337
Kelly, P.C.	Shipping Manager; representing Vic. State Committee, Australian Chamber of Shipping, Melbourne	"	147
Lade, J.N.	Acting Director of Planning; Victorian Railways Board, Melbourne	"	2, 387
Langford, C.J.	Terminal Manager, Webb Dock, Australian National Line, Melbourne	"	115
Lyon, S.G.	Manager; Sea Pak Transport Services, Melbourne	"	224
Mottershead, G.	Civil Engineer; Chief Engineer, Railway Construction and Property Board, Melbourne	"	2, 387
Manson, R.P.B.	Cargo Services Superintendent, representing Australian National Line, representing Victorian State Committee, Australian Chamber of Shipping, Melbourne	"	115, 327 147

Name	Occupation and Address	Examined at	Transcript Page No.
Paterson, J.L.	Locomotive Driver; Secretary, Australian Federated Union of Locomotive Enginemen, Melbourne	Melbourne	264
Patterson, R.R.	Civil Engineer; Divisional Engineer, Metropolitan Division, Country Roads Board, Melbourne	"	2, 387
Powell, I.R.	Financial Planner; representing North Melbourne Assoc., Melbourne	"	237, 380
Saggers, W.H.	Consultant Transport Planner; City of Port Melbourne, Melbourne	"	166, 351
Smith, D.F.	Architect; Project Architect, Building Division, Public Works Dept., Melbourne	"	270
Stevens, A.J.F.	Civil Engineer; Chief Engineer, Port of Melbourne Authority, Melbourne	"	66, 337
Swan, J.F.	Architect; Director of Building, Public Works Dept., Melbourne	"	270
Thompson, T.W.	Town Planner; Senior Planning Officer, City of Melbourne, Melbourne	"	210
White, N.J.	Civil Engineer; Chief Engineer (Development) Public Works Dept., Mt. Eliza	"	270

Name	Occupation and Address	Examined at	Trans- cript Page No.
White, P.	Shipping Clerk; Councillor & Mayor, City of Port Melbourne, Melbourne	Melbourne	166
Williams, H.K.	Shipping Manager; representing Victorian State Committee, Aust. Chamber of Shipping, Melbourne	"	147
Wyatt, M.C.	Town Planner; Town Planning Consultant, Ministry of Housing, Melbourne	"	219

ACKNOWLEDGMENTS

The Committee desires to place on record its gratitude for the valuable assistance it received from so many quarters during the Inquiry.

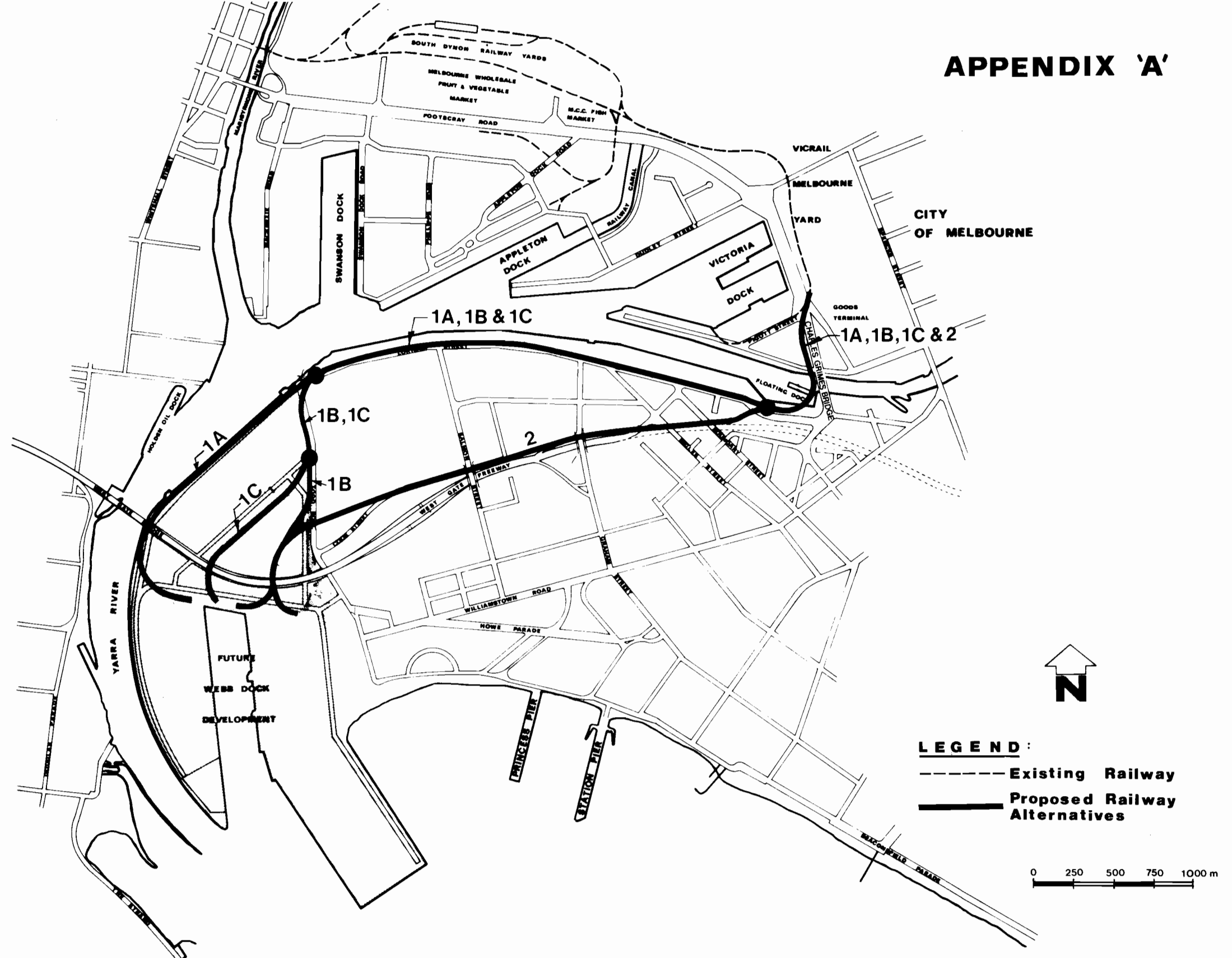
It is desired to commend all witnesses for their co-operative approach to the Inquiry and the manner in which their evidence was prepared and presented.

The large volume of evidence taken was recorded most capably by the Chief Government Shorthand Writer and members of his staff and the Committee desires to express its warm appreciation of the services so rendered.

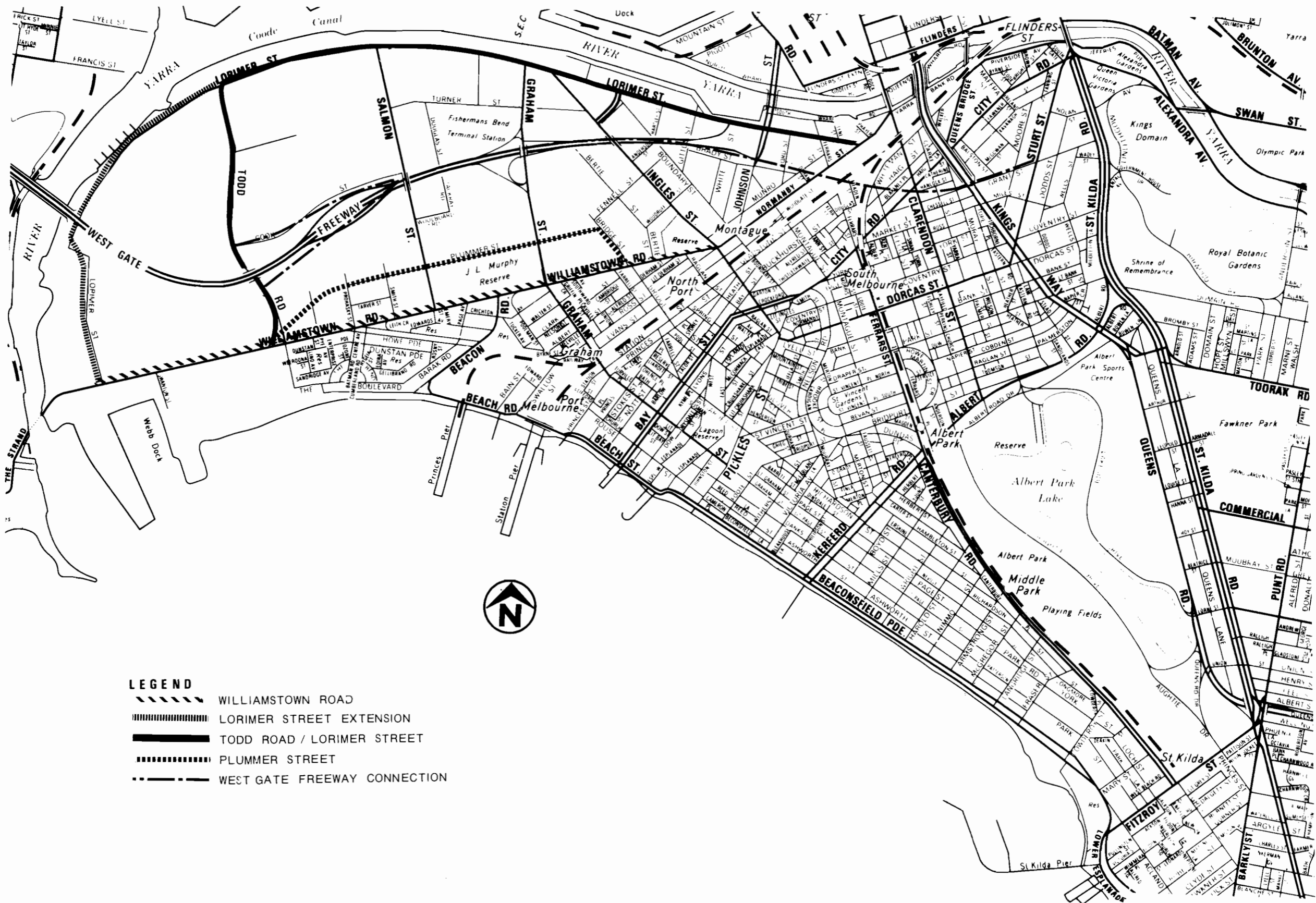
R. I. KNOWLES,	CHAIRMAN
J. H. SIMPSON,	DEPUTY CHAIRMAN
C. W. BURGIN,	MEMBER
N. M. McINNES,	MEMBER
R. A. MACKENZIE,	MEMBER
D. K. MCKELLAR,	MEMBER
J. L. SIMMONDS,	MEMBER
K. I. M. WRIGHT,	MEMBER

A. N. CASTLE, SECRETARY
14th January, 1982.






APPENDIX 'A'



ALTERNATIVE RAIL PROPOSALS FOR ACCESS TO WEBB DOCK



LEGEND

-  WILLIAMSTOWN ROAD
-  LORIMER STREET EXTENSION
-  TODD ROAD / LORIMER STREET
-  PLUMMER STREET
-  WEST GATE FREEWAY CONNECTION

ALTERNATIVE ROAD PROPOSALS FOR ACCESS TO WEBB DOCK

Appendix B

T A B L E 1

CARGO FORECASTS FOR WEBB DOCK

	1980/81	1985/86	1990/91	1995/96	2000/01
<u>Containerised Cargo (TEU)*</u>					
Ro-Ro Overseas: ANL Terminal	49,500	61,500	76,300	90,400	107,000
Lo-Lo Overseas: ANL Terminal		20,700	28,700	34,300	40,900
Ro-Ro Coastal: ANL Terminal	65,000	71,800	79,300	87,600	96,700
Lo-Lo Overseas: Non ANL Berths			12,500	43,600	110,000
Total	114,500	154,000	196,800	255,900	354,600
<u>Non-Containerised Cargo (Revenue Tonnes)</u>					
Ro-Ro Overseas: ANL Terminal	0.140m**	0.155m	0.171m	0.188m	0.208m
Ro-Ro Coastal: ANL Terminal	0.970m	1.059m	1.156m	1.262m	1.378m
Total	1.110m	1.214m	1.327m	1.450m	1.586m

* (TEU) 20 ft equivalent units

**m = million

T A B L E 2

WEBB DOCK RAILED CONTAINERS FORECAST

YEAR	Containers for Rail				TOTAL
	ANL Terminal			Non-ANL Terminal	
	Ro-Ro Overseas	Lo-Lo Overseas	Coastal	Lo-Lo Overseas	
1980/81	9,612(1)		389(1)		10,001(1)
1981/82	10,000		400		10,400
1982/83	10,500	3,200	400		14,100
1983/84	10,900	3,400	500		14,800
1984/85	11,400	3,700	500		15,600
1985/86	11,900	3,900	500		16,300
1986/87	12,400	4,200	600		17,400
1987/88	13,000	4,500	600		18,100
1988/89	13,600	4,800	600		19,000
1989/90	14,100	5,100	700		19,900
1990/91	14,800	5,500	700	3,100	24,100
1991/92	15,300	5,700	700	3,800	25,500
1992/93	15,800	5,900	700	4,500	26,900
1993/94	16,300	6,100	700	5,400	28,500
1994/95	16,900	6,300	700	6,500	30,400
1995/96	17,500	6,500	700	10,900	35,600
1996/97	18,000	6,700	800	13,000	38,500
1997/98	18,700	7,000	800	15,700	42,200
1998/99	19,300	7,200	800	18,800	46,100
1999/00	19,900	7,500	800	22,600	50,800
2000/01	20,600	7,800	800	27,500	56,700

(1) Actual level based on detailed records for ANL component, plus estimates provided by other shipping agents.

T A B L E 3

Cost Estimates of Alternative Rail
Proposals (Exclusive of Rail Works
in Webb Dock Port Area)

	<u>Route 1A</u> <u>Lorimer St.</u>	<u>Route 1B</u> <u>Lorimer St/ Todd Rd.</u>	<u>Route 1C</u> <u>Lorimer St./</u> <u>Rear of</u> <u>Aircraft</u> <u>Factories</u>	<u>Route 2</u> <u>Freeway</u>
	\$	\$	\$	\$
Trackwork	1,610,000	1,635,000	1,756,000	1,365,000
Signalling and Controls	440,000	370,000	386,000	220,000
Bridge across River Yarra	3,500,000	3,500,000	3,500,000	3,500,000
Tunnel under Graham Street	-	-	-	1,500,000
Miscellaneous	2,535,000	2,240,000	2,344,000	2,610,000
	<u>8,085,000</u>	<u>7,745,000</u>	<u>7,986,000</u>	<u>9,195,000</u>
Repositioning dry dock, in- cluding necess- ary reclamation of River Yarra	3,300,000	3,300,000	3,300,000	3,300,000
Land acquisition and injurious affection	484,000	540,000	540,000	1,485,000
	<u>3,784,000</u>	<u>3,840,000</u>	<u>3,840,000</u>	<u>4,785,000</u>
Total Estimated Cost as at December 1980	<u>11,869,000</u>	<u>11,585,000</u>	<u>11,826,000</u>	<u>13,980,000</u>
Track Length	<u>5,845 m</u>	<u>5,640 m</u>	<u>5,900 m</u>	<u>4,590 m</u>
Track cost per metre	<u>\$2,030</u>	<u>\$2,054</u>	<u>\$2,005</u>	<u>\$3,046</u>
Additional cost of providing a standard gauge connection by the addition of a third rail.	\$290,000	\$280,000	\$290,000	\$230,000

T A B L E 4

Road Link Container Costs To/From Webb Dock

<u>20' CONTAINER</u>	<u>FREIGHTBASES</u>	<u>MONTAGUE</u>	<u>DYNON</u>	<u>CONRAIL PARK</u>
	\$	\$	\$	\$
<u>LOADED</u>				
CARTAGE	22.80		24.04	25.50
LIFTING	30.40 (2 lifts)		17.00(1 lift)	44.00(2 lifts)
	_____		_____	_____
TOTAL	53.20	45.50	41.04	69.50
	=====	=====	=====	=====
<u>EMPTY</u>				
CARTAGE	16.27		16.27	
LIFTING	30.40(2 lifts)		17.00(1 lift)	
	_____		_____	
TOTAL	46.67	45.50	33.37	
	=====	=====	=====	

