

STRATEGIC TRANSPORT PLANNING STUDIES IN VICTORIA

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ABSTRACT: *Victoria's Economic Strategy places considerable emphasis on improving the performance of the transport system and reducing the real costs of its provision to the community. Efficient access to the principal focus of Victoria's interstate and overseas trade activities, the major sea and airports, is vital to the success of the strategy.*

Several strategic transport studies are being directed at strengthening transport and communications in the Port Phillip Region.

The Metropolitan Arterial Road Access Study (METRAS) was completed recently when the study recommendations were accepted by the Government. This strategy will form the basis of Melbourne's road programme for the next ten years. The paper focusses on the final phase of the METRAS study.

The National Road Strategy for Victoria (NatRoV) is aimed at extensions to the National road network in Victoria and is focussed on Melbourne's strategic network.

Two public transport studies, the Metropolitan Public Transport Industry Plan (MetPlan) and the State Transport Industry Plan (STAP) commenced in late 1986.

The paper sets out the objectives of NatRoV and the two public transport studies, the context in which they are being undertaken, the study programmes and approaches, and the management and consultation arrangements. The paper also describes three corridor studies, both road and public transport, and places them in the overall context.

The paper does not attempt to cover the technical approaches used in the studies. It concentrates instead on the processes used to ensure that a wide range of inputs are obtained and to facilitate acceptance of recommendations.

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INTRODUCTION

Victoria's Economic Strategy places considerable emphasis on improving the performance of the transport system and reducing the real costs of its provision to the community. This is being achieved by increasing productivity and by targeting public investment to those components of the system which can facilitate the movement of goods and services and thus support essential private sector production and trade activity. Efficient access to the principal focus of Victoria's interstate and overseas trade activities, the major sea and airports, is vital to the success of the strategy (Victorian Government 1987).

The Government's Urban Strategy, which is to be released this year, is also relevant to the development of transport strategies. It will emphasise consolidation of existing urban areas and control of urban expansion, rather than uncontrolled growth beyond the urban fringe. Increased activity in central Melbourne and the 15 designated District Centres is also proposed.

Several strategic transport studies are being directed at strengthening transport and communications in the Port Phillip Region.

The Metropolitan Arterial Road Access Study (METRAS) was completed recently when the study recommendations were accepted by the Government (Ministry of Transport 1987). This strategy will form the basis of Melbourne's road program for the next ten years. An earlier paper (Webber, Evans and Wallis 1986) set out the study approach, and assessment methodology, and documented progress to a stage just prior to the formulation of the study recommendation early last year. This paper focuses on the final phase of the study and discusses the response to the 1986 recommendations and the subsequent modification of the strategy.

The National Road Strategy for Victoria (NatRoV) is aimed at extensions to the National road network in Victoria and is focussed on Melbourne's strategic network.

Two public transport studies, the Metropolitan Public Transport Industry Plan (MetPlan) and the State Transport Industry Plan (STAP) commenced in late 1986 and are scheduled for completion within the next 12 months. It is intended that both studies, which are being undertaken with the involvement of the public transport unions, will lead to an Industry Development Agreement between the unions and the Government.

The Ministry of Transport has a key role in the integration of the various strategic studies.

METRAS

Objectives and Scope

The METRAS study, which commenced in September 1983, was carried out by the Ministry of Transport (MoT), with assistance from the Road Construction Authority (RCA), the Road Traffic Authority (RTA), other agencies and consultants. METRAS had two related objectives:

- * To prepare an arterial road strategy for Melbourne supportive of the Government's economic, metropolitan and transport strategies (and responsive to environmental and resource constraints) in order to guide road network development in the metropolitan area, in particular over the next ten years
- * to review the need for particular Melbourne Metropolitan Planning Scheme (MMPS) Proposed Main Road Reservations and Widening

The study was carried out in four stages :

1. Identification of road-related issues and concerns
2. Development and assessment of alternative strategies to deal with these issues and concerns (and others which may have arisen)
3. Formulation of a recommended strategy
4. Review of the study's recommendations, after receipt of comments and further investigation

Considerable emphasis was placed on public consultation. After each of the first three stages, reports were distributed to all metropolitan councils and relevant Government agencies for review. An extensive mailing list of community groups and individuals was developed as the study progressed, and all who registered received copies of the published reports. Availability of the reports was also advertised in local newspapers and copies were sent to all metropolitan public libraries.

The final strategy (Ministry of Transport 1987) covers:

- * priorities for major road proposals
- * further corridor investigations where deficiencies are apparent, but the best means of overcoming them are not

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- * special purpose programs of lower cost, small scale road projects which respond to specific objectives
- * a process to assist the management of the road network

METRAS dealt with road improvement priorities in the context of a feasible budget. It was not a study of road needs or road funding, in the sense of setting various standards of traffic performance, adopting a range of design standards to overcome performance deficiencies, and costing the resultant improvement projects. Instead, METRAS identified and set priorities for projects and programs which met a broader range of government goals (not just traffic performance).

Funding was a major consideration. The level of funds likely to be available for major new projects or other initiatives in the ten year period is about \$600M given the following assumptions:

- * the present level of funding (about \$100M per annum) on operation/maintenance, rehabilitation, traffic facilities and minor improvement projects will be maintained into the future
- * major projects which are in progress or are committed for construction will be completed
- * the existing arrangements for funding the Australian Land Transport Program (ALTP) Trust Fund will continue after 1989/90
- * an equivalent of the Australian Bicentennial Road Development (ABRD) Trust Fund continues after 1988
- * State funds continue with the current level in real terms

Even though the METRAS budget did not allow for National road funds being used for roadworks in the urban area, it strongly supported such an initiative.

The Assessment Approach

Large road projects can achieve significant benefits, both in terms of improved accessibility and environmental amenity. However, they absorb a large proportion of available funds, and hence only a limited number could be implemented within the next ten years. The benefits from these would flow to the community at large in terms of travel cost savings, but accessibility and environmental gains would flow to a relatively small proportion of the community, and opportunities in other areas would be neglected.

To overcome this, METRAS also examined a range of smaller scale but more widely based network improvement programs relating to support for

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District Centre and urban development initiatives, freight movement, upgrading heavily trafficked two lane roads in developing areas, and improvements to assist road-based public transport.

A cost effectiveness approach was used in the assessment of major proposals. The range of effectiveness measures investigated is set out in Ministry of Transport (1985) and Webber, Evans and Wallis (1986). Performance indicators used in the final assessment of proposals were:

- * total traffic benefits
- * truck traffic benefits
- * accessibility of inner and middle area population to jobs (this gave a low weighting to jobs beyond 20-30 minutes driving time)
- * an Accessibility Deficiency Relief Index (ADRI), to give a measure of the extent to which a road project would improve access to jobs in those areas having a current accessibility below the metropolitan average
- * accessibility to District Centres and the Central Activities District

These measures were divided by the cost of each proposal to give cost-effectiveness measures. Social, environmental and community impacts of proposals were also taken into account.

The Final METRAS Strategy

The draft recommendations prepared by the METRAS team were published in May 1986 and responses were invited by September. 210 responses were received, including 61 from councils and local government organisations. Although there was broad agreement with the priorities recommended, several major issues were raised which required further consideration:

- * strong support for early construction of the Outer Ring Road in the western suburbs, as distinct from lesser scale arterial road improvements
- * strong opposition to construction of the \$25M Buckley Street and Ashley Street bridges over the Maribyrnong River in Avondale Heights, with many respondents supporting early construction of the Outer Ring Road in the western suburbs instead
- * support for early construction of the northern section of the Outer Ring Road

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- * strong support for early construction of the Western Bypass of the central area
- * opposition to a proposed investigation into a new crossing over the middle Yarra (between Templestowe and Lower Plenty)

The other major issues raised were of a general nature:

- * the funding constraint used by METRAS, which limited the extent of the recommendations
- * the absence of a parallel metropolitan public transport strategy, and the need to develop a total transport strategy, notably for the central area and inner suburbs

Following publication of the reports, and as a result of the strong views favouring the early construction of the western and northern sections of the Outer Ring Road, further assessments were made by the Road Construction Authority and the METRAS traffic planning consultant (Travers Morgan Pty Ltd) to determine the benefits of the various staging options for the introduction of strategic projects and their inter-dependence. This work accepted the high priority already established for the Broadmeadows section of the Outer Ring Road between the Tullamarine Freeway and the Hume Highway.

The results of the consultant's work are set out in Figure 1. The consultant concluded that the various strategic projects should have the following priorities:

Priority A	Outer Ring Road West
Priority B	Outer Ring Road North Eastern Arterial Road (Doncaster to Ringwood) Central Area Western Bypass
Priority C	Scoresby Route E14 in Broadmeadows

This further consultant work, together with a careful consideration to the responses by the study team, led to some amendments to the May 1986 recommendations. The major changes were the inclusion of the western section of the Outer Ring Road and the Western Bypass into the high priority group, both projects to be commenced within the ten year METRAS period.

The final METRAS strategy, which is scheduled for release in May 1987, is as follows :

- (1) Continue funds for operating, maintaining and rehabilitating the arterial road network, for minor improvement works (projects less

Route / Section	Standard (1)	Capital Cost \$M (2)	Benefit / Cost (3)		Accessibility / Cost (4)		
			Total Traffic	Truck Traffic	To Jobs (5)	To DC's (6)	ADRI (7)
OUTER RING ROAD NORTH							
-Mahoneys Rd-Dalton Rd	2L	26	2.0(2.2)	(8)			
-Dalton Rd-Plenty Rd	2L	19	1.3(1.5)	(8)			
-Total Length; North	2L	45	1.8				
OUTER RING ROAD WEST							
-WGF-Western Hway	4LD	54	1.3(2.1)				
-Western - Calder	4LD	78	1.4(1.8)				
-Calder-Tullamarine	4LD	44	0.7(1.2)				
-Total Length West	4LD	176	1.5				
E14 LINK							
-ORR - Somerton Rd	4LD/2L	65	0.3				
WESTERN BYPASS							
Footscray Rd- Tullamarine Fwy	4LD	194	0.6				
EASTERN ARTERIAL							
Doncaster Rd - Ringwood	4LD	138	0.8				
CORESBY ROUTE							
Ringwood - Aulgrave Fwy	2L	103	0.6				

FOOTNOTES

- (1) Standard - 2L is 2 lane - 2 way, 4LD is 4 lane divided
 - (2) Cost - includes allowance for inflation to \$M (1986 / 87) and 15% on - cost for overheads etc
 - (3) Benefit / Cost is the sum of calculated time and vehicle operating cost savings divided by capital cost
 - (4) Accessibility / Cost is the value of the accessibility measure divided by cost
 - (5) Accessibility to inner and middle population to jobs (divided by cost)
 - (6) Accessibility to District Centres and Central Activities District (divided by cost)
 - (7) Accessibility Deficiency Relief Index or improvement in access to jobs in areas having a current accessibility below the metropolitan average.
 - (8) Benefits increase considerably if the adjacent section is built first. This is reflected in the high value for the total length
- (a) For benefit / cost ratios on the Outer Ring Road, the unbracketed figure for each section is for that section being built alone the figure within brackets is for that section constructed after an adjacent section.
- (b) Truck traffic benefit / cost ratio and the accessibility measures are shown in bar chart form, with the best performing proposal in each assessment category assigned a value of 100. The value shown for each other proposal is relative to that base

Figure 1 : Performance Measures for Major Projects

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than \$2M each) and for the RTA's Traffic Facilities program, in real terms, currently about \$100M per year (or \$1,000M over 10 years)

- (2) Complete committed major improvement projects, including those already under construction, at a cost of \$160M (now including the second carriageway of West Gate Freeway in South Melbourne)
- (3) Build or commence major improvement projects, with a current cost of \$600M (see following discussion)
- (4) Earmark \$100M for three Special Purpose Programs :
 - upgrading heavily trafficked 2 lane roads in developing areas to 4 lane standard by increasing the current level of funding (\$1M/year) over the next five years by a total of \$60M
 - District Centre access and circulation roads : \$2M per year (\$20M over 10 years)
 - improvements to facilitate truck operations : \$2M per year (\$20M over 10 years)
- (5) Give more emphasis in existing programs, i.e. as part of (1) to :
 - completing the tram Fairway Program, particularly intersection improvements
 - improvements to help buses, such as signal priority, bus lanes and pavement rehabilitation on bus routes
 - road safety improvements
 - major intersection improvements at critical bottlenecks on Primary Arterial roads
 - more efficient use of kerb space on Primary Arterial Roads
 - bicycle facilities
- (6) Carry out a number of planning and traffic management investigations to determine the need for and scale and priority of improvements to address several identified road network deficiencies :
 - timing of bridge duplications over the Yarra River at Fitzsimons Lane and Chandler Highway, and the Maribyrnong River at Avondale Heights
 - traffic management measures in the North Coburg and North Fitzroy areas
 - the Swan Street bridge area south of the Central Activities District

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intersection improvements on Canterbury Road, in Camberwell and Box Hill

- (7) Establish a Road Monitoring and Strategies Committee to advise on and co-ordinate road network planning tasks, including the review of road classifications, review of MMPS road reservations and management, overseeing the establishment of performance measures and monitoring of road network performance, and the overview of the investigations listed in (6). Related to this is the need to develop and improve computer-based road network modelling capabilities

It is anticipated that the Road Monitoring and Strategies Committee will provide the focus for greater integration of strategic activities, particularly for those issues (such as funding and system performance) which have impacts across the road spectrum. The Road Construction Authority, which has the lead role in the management of Victoria's principal road network, is convenor of the Committee.

The key arterial road improvement projects which have been already committed by the Government or have been adopted as a result of METRAS are shown on Figure 2, and are:

Primary Major Circumferential Route :

- (a) high priority for the Broadmeadows section of the Outer Ring Road, linking Pullamarine Freeway to the Hume Highway
- (b) commencement of construction of the western section of the Outer Ring Road, giving priority to the Western Highway to Calder Freeway section
- (c) implementation of the findings of the current Eastern Corridor Road Development Study

Pullamarine - West Gate - South Eastern - Mulgrave Route :

- (d) commencement of construction of the Western Bypass in North Melbourne within the next 10 years
- (e) completion of the duplication of Footscray Road between Moonee Ponds Creek and the Charles Grimes Bridge in West Melbourne
- (f) completion of the West Gate Freeway between Johnson Street and Kingsway in South Melbourne
- (g) investigate the road system between West Gate and South Eastern Freeways to resolve increasing congestion caused by through traffic and traffic generated by the new projects in the area and the central area

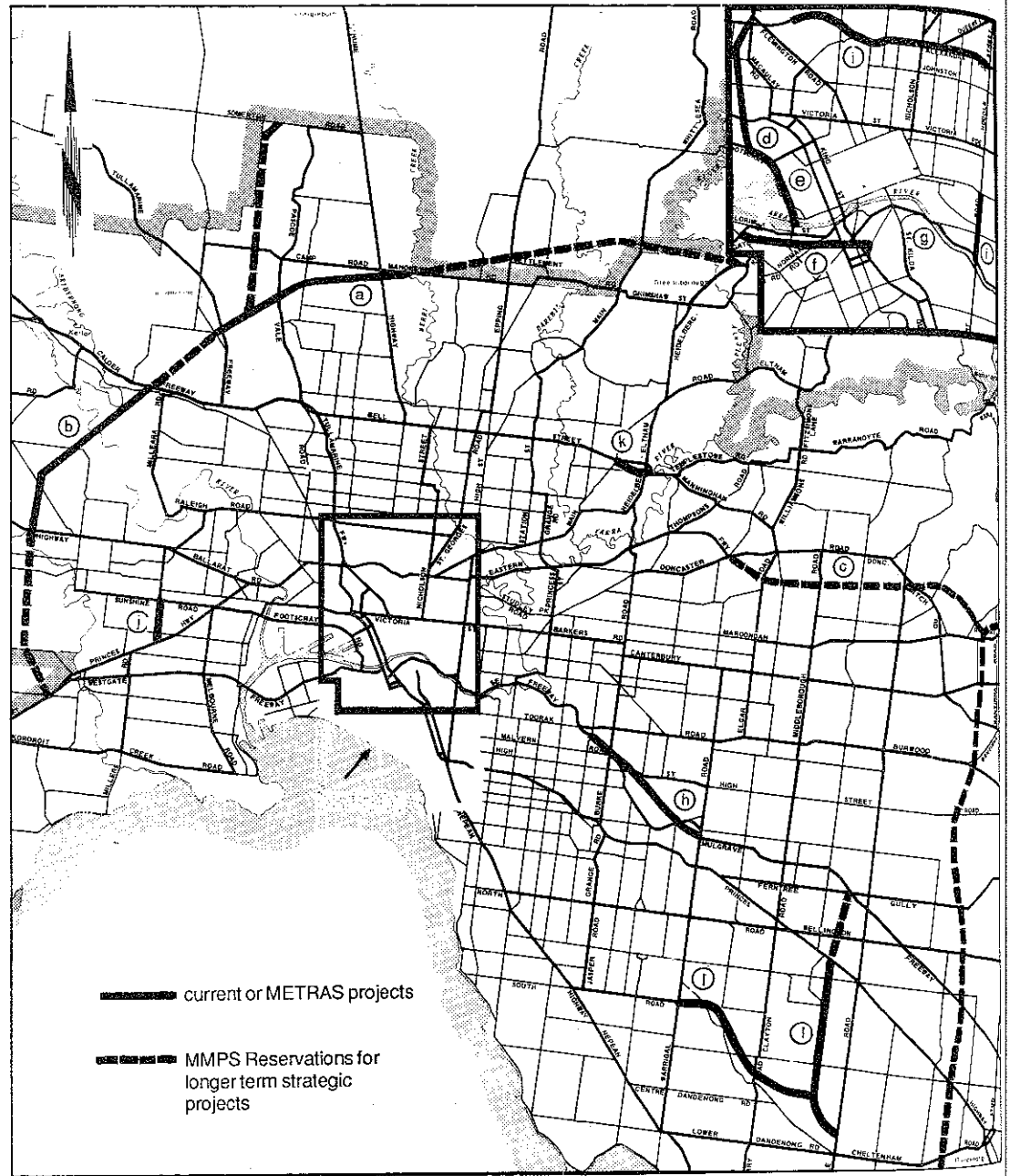


Figure 2 : Major Road Strategy

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- (h) completion of the South Eastern - Mulgrave Arterial Road Link (SEMARL) in Malvern

Central Area Bypasses :

- (i) upgrading the Eastern Highway route north of the central area and Punt Road to the east (north of the Yarra River)

Other Major Route Improvements :

- (j) upgrading Paramount Road between Princes Highway and Sunshine Road/Ashley Street in Brooklyn
- (k) Banksia Street - Bell Street connection in Heidelberg
- (l) improved access to the industrial areas of the south-east by building the Springvale Bypass along Westall Road and the Dingley Route between Warrigal Road/South Road and the Springvale Bypass in Heatherton

System Wide Improvements :

- (m) the acceleration of the upgrading of two lane two way roads in developing areas
- (n) point improvements to facilitate truck operations, such as flaring of intersections and priority turn movements

There are also a number of projects on radial routes on the periphery of Melbourne which are not discussed in this paper.

The strategy would cost \$700M, and could well exceed the estimated available funds. It will spill into the next decade unless there is a significant re-allocation of transport funds into urban arterial roads by both the State and Commonwealth Governments. This stresses the importance of :

* The current reviews by the RCA and the Bureau of Transport Economics of the future of National Road funding following completion of major upgradings of currently declared National Roads in Victoria (the Hume and Western Highways, and the Princes Highway to the Latrobe Valley). Currently, up to \$100M per annum is being spent on these routes almost entirely outside the urban area

* The need to retain the 2c/litre fuel levy applied by the Commonwealth to fund the ABRD Program. These funds return about \$94M per year to Victoria for road improvements

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The RCA has set up a METRAS Co-ordination Unit within the Corporate Development Division to oversee the implementation of the strategy in the Authority, particularly with respect to the forward development of the urban road program.

CORRIDOR ROAD STUDIES

The Road Construction Authority is currently undertaking major corridor studies for two of the strategic routes, the Eastern route and the Western Bypass, projects (c) and (d) respectively in Figure 2. Both are being undertaken as Environment Effects Statements, with considerable involvement of local Councils and full community consultation, and will result in planning scheme amendments to allow road development to occur.

Liaison Committees with Stage agency and local Government representation have been established for both studies to provide advice on important issues and study procedures, and to facilitate community consultation.

A planning scheme road reservation already exists for the Eastern route, which includes a bypass of Ringwood. However, it is not adequate for current requirements. Major issues being addressed in the Eastern Corridor Road Development (ECORD) study are air quality, traffic effects in the inner area, the effect on the creek environment in the corridor, the integration of landscaping treatments into the road development, and the interaction between demand for public and private transport. Consultants have been engaged for air quality and landscape studies, for advice and facilitation of community consultation and for the public transport study described later in the paper. The EES is scheduled for completion in late 1987.

There is no current road reservation for the Western Bypass. The major issue in this study is the high project cost, and the balance between cost and environmental benefits for the different location options. Consultants are being used for community consultation and tunnel investigations.

NATIONAL ROADS STRATEGY FOR VICTORIA (NatRoV)

The Economic Strategy stresses the importance of manufacturing in improving the competitiveness of the trade-exposed sector (those that export or compete with imports). The road sector has a major and increasing role in moving freight to and from key transport facilities (sea and airports, rail terminals). It is also the primary system for the distribution of materials and goods between suppliers, manufacturers, warehouses and retailers.

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The Economic Strategy stresses the need to identify a National road network within Melbourne to complement and capitalise on the existing rural National road network and to facilitate urban freight movement.

The Road Construction Authority is managing a study to examine the rationale for extending the present National road network into the Melbourne metropolitan area and, if such an extension is warranted, to prepare a development strategy for metropolitan National roads. The principal consultant is the same as that used for METRAS, Travers Morgan Pty Ltd. The National Institute of Economic and Industry Research and Henshall Hansen Associates are also involved. A Steering Group of State agency representatives (from the transport, industry, budget and planning areas) oversees the study.

The study has focussed on the interaction between economic activity, freight movement and road corridors. The conventional approach, which was used in METRAS, calculates benefits (in terms of reduced operating costs and travel time) which accrue to all truck operators as a result of major road improvements. This has been supplemented in NatRoV by examining the trade-exposed manufacturing sector and the interaction (in road freight terms) between this sector and key transport nodes.

Criteria have been developed for assessing the suitability of specific metropolitan corridors, and route improvement projects in these corridors, in helping achieve national economic priorities :

* The corridor should link major areas of freight generation/attraction, especially those in which the trade-exposed manufacturing sector is concentrated, and specifically:

- the Port of Melbourne
- major industrial areas (in and outside the metropolitan area)
- Melbourne Airport
- major rural arterial routes, particularly existing National roads

* The corridor should carry high road freight flows

* Route improvement projects should effectively address problems of current poor corridor performance affecting freight (e.g. congestion, indirect routes)

* Improvement projects should be justified on economic benefit: cost criteria

* Improvement projects should be seen by manufacturing industry, the road freight sector and other interested parties as warranting high priority and providing substantial benefits to freight movement

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The consultant's report is scheduled for completion in mid-1987.

METROPOLITAN PUBLIC TRANSPORT INDUSTRY PLAN (MetPlan)

Objectives and Scope

As indicated earlier, one of the main issues which arose in the responses to the 1986 METRAS recommendations was the need for a public transport strategy to complement the METRAS strategy.

MetPlan, which commenced in late 1986, is being undertaken jointly by the Metropolitan Transit Authority and the Ministry of Transport. It is being developed in consultation with all levels of Government, public transport unions and the community.

The primary objective of MetPlan is to provide a strategic plan for future public transport services. Within the limits of available funding, and in accordance with Government policies, the plan will seek to :

- * maximise the broad community benefits associated with public transport
- * respond to changing patterns of urban and socio-economic development equitably, efficiently, and in ways that favour urban consolidation
- * increase public transport's share of the total metropolitan transport task by providing a viable and attractive alternative to use of the private car
- * set acceptable standards of service for those who necessarily rely on public transport
- * ensure the most efficient utilisation of resources possible within the context of the social objectives of public transport
- * provide a viable future for the public transport industry and its employees
- * provide a basis for an Industry Development Agreement between the public transport unions and the Government
- * maximise the extent to which the Government's objectives are met under its economic, social justice, urban, energy and conservation strategies

The study will provide a recommended framework within which forward programs will be implemented over the next fifteen years.

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MetPlan is part of a continuing process in which strategic options are reviewed in response to changing circumstances. It is not intended as a rigid plan for the future, but as a framework to guide policy, investment and operational decisions, including development of MTA Business Strategies.

Post-MetPlan studies will be necessary to evaluate specific proposals for major investments, detailed service strategies in developing areas and operational policy changes, prior to any implementation.

Approach

The study approach comprises three main streams of work :

- * analysis of the strengths and weaknesses of existing services, and existing proposals to build on or rectify these
- * analysis of future scenarios of metropolitan development and their implications for public transport, identification of appropriate transport strategies
- * identification and analysis of options for the financing, management and staffing of the public transport system

These three streams of analysis are interconnected and will be brought together later in the study for consolidated evaluation. (refer Figure 3)

The individual activities have been arranged within a work program that:

- * allows work to proceed in parallel on relatively self-contained tasks, while making provision for appropriate interaction and consolidation
- * maintains an active program of community consultation, with regular opportunities for interested parties to contribute their views at important stages of the work
- * provides, at an early stage in the study, a detailed Discussion Paper designed to raise the level of informed community debate

A draft final report is scheduled for release in late 1987 for discussion purposes.

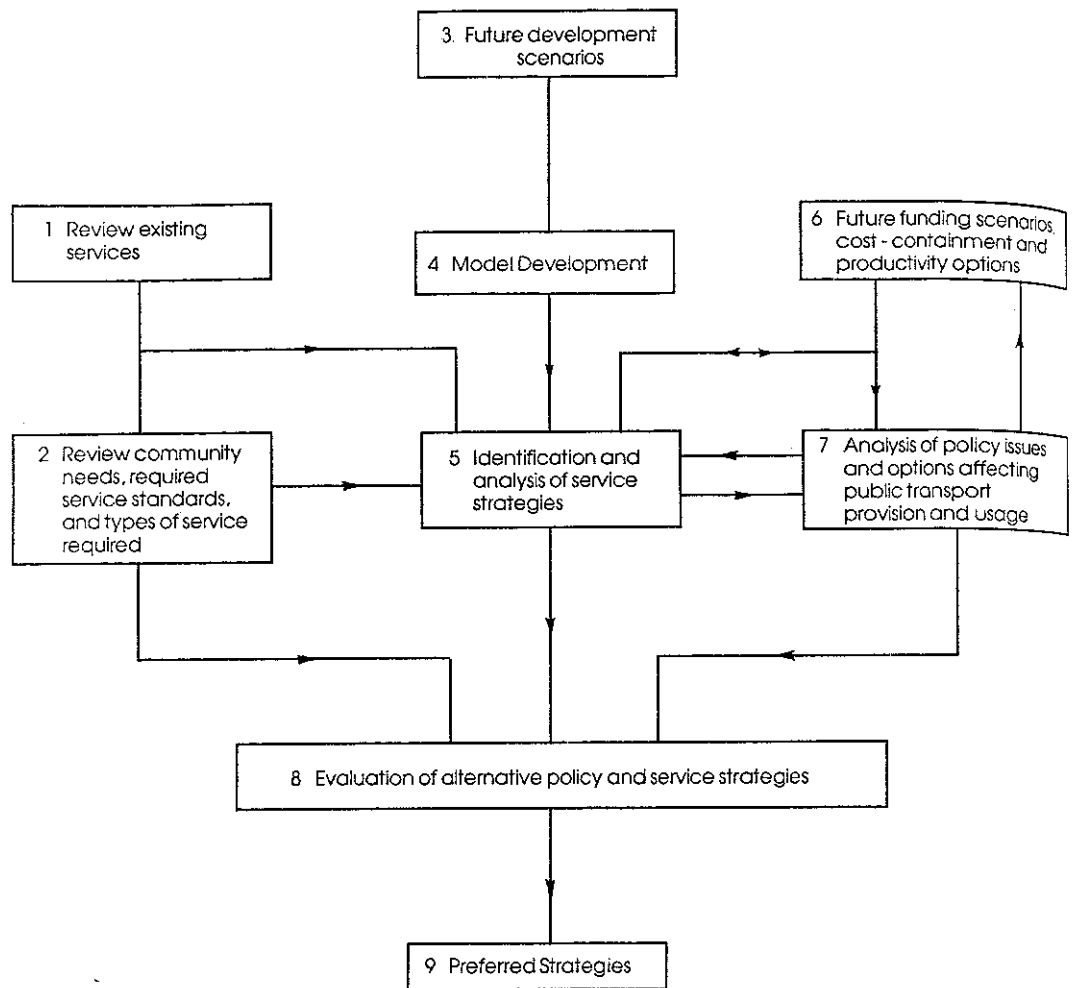


Figure 3 : Principal Study Activities for Metplan

EASTERN CORRIDOR PUBLIC TRANSPORT STUDY

A study into future public transport needs in Melbourne's Eastern corridor was commenced in late 1986. The Eastern Corridor Public Transport (ECOPT) study is separate from but concurrent with the Eastern Corridor Road Development (ECORD) study, and will contribute to the ECORD Environment Effects Statement. While ECOPT is a study in its own right, its results will also be incorporated within the Metropolitan Transport Industry Plan (MetPlan) being developed by the Metropolitan Transit Authority.

The objectives of the ECOPT study are :

- * To investigate the options for improved public transport service in the Eastern Corridor, taking into account existing and future demands
- * To develop a strategy for increasing public transport usage, taking into account the costs and benefits (including those related to car traffic in inner areas)
- * To identify the relationship between public transport and road investment and usage, and in particular to:
 - estimate the influence of public transport investment on levels of road and public usage
 - estimate the effect of major road investment for existing and potential public transport usage
 - determine the extent to which the need for, and timing of, road investment are influenced by the level of public transport investment

Four key tasks have been identified for the study program, involving examination of :

1. Future travel demand estimates
2. Effectiveness of the existing services
3. Improvement options for public transport
4. Environmental, social and energy effects

The work program is being managed by the Metropolitan Transit Authority. A Liaison Committee, convened by the Ministry of Transport and involving representatives from the relevant transport Authorities, unions, MTA Regional Advisory Boards and local government, has been established to provide advice on important issues and study procedures, and to facilitate community consultation.

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Work to date has concentrated upon the development of travel demand estimates, and examination of the effects of various transport options on these estimates. A consultant, Travers Morgan Pty Ltd has been appointed to provide assistance and advice in this area. Key stages in this work are as follows :

- * analysis of travel patterns in the Easter corridor, especially work travel towards the Central Activities District and inner suburbs
- * assessment of the likely effects of future growth in the corridor and other significant land use changes
- * examination of relative times and costs of travel by alternative modes
- * definition of captive and choice markets for public transport
- * the development of a mode choice model to simulate travel behaviour and to test its sensitivity to possible changes in the transport system
- * on-board surveys to assist in understanding mode choice and in model calibration
- * checks to ensure consistency between simulated and actual travel volumes and patterns
- * identifying transport options for the corridor
- * assessment of various public transport options, with and without the Eastern corridor road extension, principally in terms of their effects on public transport patronage and road usage

The consultant's report is scheduled for completion in June 1987.

STATE TRANSPORT INDUSTRY PLAN (STAP)

STAP will outline the steps that need to be taken to enable the State Transport Authority (V/Line) to provide efficient and competitive transport services for the next decade. STAP, the Statewide equivalent of MetPlan, is being developed with the direct involvement of trade unions and the freight industry and community groups.

STAP aims to :

- * assess the likely demand scenarios for interstate freight and passengers
- * present and evaluate alternative scenarios for meeting demand in terms of Government policies

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- * examine employment impacts of the scenarios within the State Transport Authority
- * evaluate technological change and modernisation opportunities
- * examine the implications of cost recovery levels
- * examine alternative financial projections

A draft final report is scheduled for early 1988.

CONCLUSION

Melbourne now has an agreed strategy to develop its arterial road network, based on extensive public consultation (particularly with Local Government), and closely integrated with and supportive of the Government's Economic and Urban Strategies. It is being used by the RCA and RTA as a framework for ongoing programs. Together with the NatRoV fundings, it provides a strong case for the allocation of funds for the development of urban National roads. Although METRAS took account of resource and funding restrictions, it provides a base from which to extend the arterial road network should additional funds become available.

METRAS has not only provided for a program of road system development, but for a systematic approach to the measurement of the performance of the network, with priorities to be based on the effectiveness of improvements in meeting Government goals and objectives.

The two public transport plans should also provide a basis for strategic and operational planning, in terms of the upgrading, extension and rationalisation of urban and rural services.

ACKNOWLEDGEMENTS

The author acknowledges the contribution of the METRAS Study Team in the Ministry of Transport, in particular Bob Evans, Manager Strategic Development, and the key role played in the development of the assessment approach and interpretation of results by Ian Wallis, Travers Morgan Pty Ltd and David Ferguson, Planning Development Engineer, Road Construction Authority.

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JRW125/LT