

MetPlan.

**Metropolitan Public Transport Industry Plan
September 1988**

UniM
Archit

388.4099
451
METP





MetPlan.

**Metropolitan Public Transport Industry Plan
September 1988**



The Met.

AN AUTHORITY OF VICTORIA TRANSPORT

ISBN 0-7241-7187-8

G 076595

THE UNIVERSITY OF MELBOURNE LIBRARY

FOREWORD

Over the last six years Melbourne's public transport system has been renewed. Antiquated red rattlers are gone from our train lines and 85 new air-conditioned trains have come on stream to modernise our fleet.

New trams are now running and Australia's first light rail is running in Melbourne.

The bus system has been radically expanded and new vehicles have replaced the old ones.

The Met is well established. This means we have an integrated Metropolitan public transport system which covers train, tram and bus. One ticket now covers the three modes of public transport.

Fares are well down in real terms. Patronage is up.

A clear commitment to improved public transport has replaced an atmosphere of decline and decay in public transport.

Now, we have the opportunity to plan for the future with confidence. MetPlan is the Government's plan for the next 15 years of public transport.

It envisages substantial growth for the system - train, tram, light rail and bus. The expanded services will serve existing routes and cater for expanding areas in Melbourne.

The plan provides for a fair and efficient public transport system for Melbourne. It will be accessible to all people living in Melbourne with attention paid to those with mobility impairment.

This is a vision which will see Victorians travel on the most up-to-date trains, trams, buses and light rail vehicles in Australia.

Victorians will be able to travel in new electric trains in an expanded system from Coolaroo in the north west to Baxter in the south east. Older style trams will be progressively replaced by the new air-conditioned, articulated, light rail vehicles. Lines will be extended in the south, east, north and west.

Stations will be upgraded. Commercial developments will be encouraged around stations to make them community hubs providing a range of service to Met customers in shopping developments. New modal interchanges will be built incorporating car parking, bus stations, rail stations and light rail interchanges. Switching from one form of transport to another at safe, clean modal interchanges will be easy.

This is truly an exciting blueprint for the future.

J. H. Kennan.

JIM KENNAN
MINISTER FOR TRANSPORT

CONTENTS

	PAGE
FOREWORD	
1. AN INTRODUCTION TO THE STRATEGY	1
1.1 BACKGROUND	1
1.2 THE PURPOSE OF METPLAN	1
1.3 THE DRAFT STRATEGY	1
1.4 REPORT OUTLINE	2
2. THE TASK	3
2.1 MELBOURNE'S FUTURE	3
2.1.1 Outline	3
2.1.2 Residential Development	3
2.1.3 Population	5
2.1.4 Employment	5
2.2 THE NATURE OF THE TASK	5
2.2.1 People Dependent on Public Transport	5
2.2.2 Students	6
2.2.3 Elderly People	6
2.2.4 Central City Commuters	6
2.2.5 Suburban Commuters	7
2.2.6 Other Trips	7
3. THE VISION	8
3.1 PATRONAGE TARGET	8
3.2 THE OVERALL SYSTEM	8
3.3 THE HEAVY RAIL SYSTEM	9
3.3.1 Service Strategy	9
3.3.2 Stations and Interchanges	10
3.3.3 Infrastructure	11
3.3.4 Maintenance Depots	11
3.3.5 Rolling Stock	12

3.4	THE LIGHT RAIL SYSTEM	12
3.4.1	Service Strategy	12
3.4.2	Vehicles	13
3.5	THE TRAM SYSTEM	13
3.5.1	Service Strategy	13
3.5.2	Tram Depot Upgrade	15
3.5.3	Infrastructure	15
3.5.4	Vehicles	15
3.6	THE BUS SYSTEM	15
3.6.1	Service Strategy	15
3.6.2	Service Development	16
3.6.3	MetLink	16
3.6.4	Night Services	18
3.6.5	Local Networks	18
3.6.6	Vehicles	18
3.6.7	Bus Priority and Infrastructure	19
3.6.8	Depots	19
3.7	SYSTEM WIDE IMPROVEMENT INITIATIVES	20
3.7.1	Interchanges	20
3.7.2	Passenger Information Systems	20
3.7.3	Security	21
3.7.4	Cleanliness	22
3.7.5	Bicycle Facilities	23
3.8	ACCESSIBLE TRANSPORT FOR PERSONS WITH DISABILITIES	23
3.9	FARES AND TICKETING SYSTEMS	24
3.10	THE PEOPLE WHO DELIVER THE SERVICE	24
3.10.1	Recruitment	25
3.10.2	Training	25
3.10.3	Staff Communication	25
3.10.4	Staff Participation	25
3.10.5	Manager and Supervisor Development	26
3.10.6	Customer Relations	26
4.	SHAPING MELBOURNE'S FUTURE - THE PUBLIC TRANSPORT OPTIONS	27
4.1	INTRODUCTION	27
4.2	CENTRAL REGION	27
4.2.1	Network Options	27
4.2.2	Bus Routes	27
4.2.3	Modal Interchanges	28

4.3	WESTERN REGION	28
4.3.1	Network Expansion	28
4.3.2	MetLink Bus Routes	30
4.3.3	Modal Interchanges	30
4.4	NORTHERN REGION	30
4.4.1	Network Expansion	30
4.4.2	MetLink Bus Routes	32
4.4.3	Modal Interchanges	33
4.5	EASTERN REGION	33
4.5.1	Network Expansion	33
4.5.2	MetLink Bus Routes	33
4.5.3	Modal Interchanges	35
4.6	SOUTHERN REGION	35
4.6.1	Network Expansion	35
4.6.2	MetLink Bus Routes	37
4.6.3	Modal Interchanges	37
5.	THE MEANS	38
5.1	FUNDING CONSTRAINTS	38
5.2	CAPITAL WORKS PROGRAM	38
5.3	RECURRENT BUDGET	39
5.3.1	System Expansion Costs	39
5.3.2	Additional Revenue	39
5.3.3	Releasing the Resources	40
5.3.4	Cost Recovery	40
6.	THE WAY AHEAD	41
6.1	THE MECHANISMS	41
6.1.1	Action Plans	41
6.1.2	Public Consultation	41
6.1.3	Union Amalgamation	42
6.1.4	Possible Integration of The Met and V/Line	42
6.2	PHASING	42
6.3	ACTION PLAN 1988-1992	43
6.3.1	Management Structures and Procedures	43
6.3.2	Projects	43
6.3.3	Investigations	46
6.3.4	Continuous Programs	46
6.4	ACTION PLAN 1993-2002	47

LIST OF FIGURES

	PAGE
2.1 Future Urban Development	4
3.1 Fairway II Program Improvement Sites	14
3.2 MetLink Bus Proposals	17
4.1 Western Region Projects	29
4.2 Northern Region Projects	31
4.3 Eastern Region Projects	34
4.4 Southern Region Projects	36
6.1 Action Plan : 1988-1992	44

1. AN INTRODUCTION TO THE STRATEGY

1.1 BACKGROUND

The Met is committed to a public transport system that gives customers a fast, reliable, safe and comfortable service, and provides staff with a safe and fulfilling work environment. The purpose of The Met is to provide that service within policy and financial guidelines set by Government.

Over the last five years the Melbourne public has responded to an improved fare system, modern vehicles, an expanded network and greater reliability; declining patronage of previous years has reversed and total patronage has increased by 11% since 1983.

These achievements and the Met's fine record for passenger safety provide a substantial base for the future.

1.2 THE PURPOSE OF METPLAN

MetPlan will provide a framework to assist decisions on the future development, operation, staffing and financing of Melbourne's public transport system over the next fifteen years. It will guide capital investment, priorities for service improvement, the introduction of new services and improved technologies, workforce planning and development and financing of operations. It will seek to maximise the benefits to Melbourne of one of its most important and most durable assets - its public transport network.

1.3 THE DRAFT STRATEGY

A MetPlan Discussion Paper, released in October 1987, outlined possible strategies for the long term development of public transport in Melbourne. Over 4,000 copies were circulated and a series of workshops and seminars was held with Councils, user groups, industrial groups, transport operators, Government agencies and professional associations. More than 100 submissions were subsequently received.

A Draft Strategy was then developed by The Met taking into account the results of the consultation program and released in May 1988. It was designed to achieve the objectives of MetPlan, as outlined above. It identified future markets for Met services, provided a patronage growth target, set out the strategy for improvement and expansion of the system to achieve this target, and the means of funding this Strategy.

This Draft Strategy was then itself the basis for further consultation involving some 60 meetings with interested groups. More than 150 written submissions were subsequently received and analysed.

The Strategy has now been finalised and is presented in this report.

MetPlan is complementary to the Metropolitan Road Access Study (METRAS) and the Central Area Transport Strategy (CATS) and the State Transport Authority Plan (STAP).

1.4 REPORT OUTLINE

The report provides plans for service improvements to Met operations and physical expansion of The Met network.

Section 2 of the report outlines the Government's Metropolitan Policy and other elements of Government policy which provide the basis for service planning over the next fifteen years. Section 3 contains the vision of The Met in fifteen years time. It describes how the network will look, and discusses new ticketing and passenger information and security systems that will be introduced. Section 4 discusses network expansion projects suggested in response to the Metropolitan Policy. Section 5 discusses the means of achieving this vision in terms of the capital investment required and the measures that will be required internally to release resources to provide for these expanded services. Finally, Section 6 sets out the actions to be taken for implementation of MetPlan.

2. THE TASK

2.1 MELBOURNE'S FUTURE

2.1.1 Outline

The Metropolitan Policy, Shaping Melbourne's Future, provides the basis for managing the growth of metropolitan Melbourne over the next fifteen years.

An important aspect of the policy is improved access to employment, retailing and community facilities; it also promotes a more compact metropolitan area. Development will be encouraged in areas near tram and train lines to increase public transport usage.

One element in implementing the Metropolitan Policy will be the Metropolitan Services Co-ordination System. The Met will be active in this system to ensure that public transport is provided when required in areas of new development and to ensure that large new developments are located to take maximum advantage of existing or proposed transport routes.

The Economic Strategy requires The Met to support Victoria's economic development through the provision of infrastructure and services to maximise development of Melbourne's business and trading strengths, cater for its role as a cultural and sporting centre, exploit its tourism potential and support its manufacturing and service industries.

Similarly The Met is committed to the Social Justice Strategy and equal opportunity. It is concerned to ensure greater equality of access to jobs, goods, services and leisure activities. The mobility needs of all members of the community, including children, students, the elderly, the disadvantaged and people with disabilities, will continue to be addressed in planning Melbourne's public transport.

The Conservation Strategy seeks to maximise the use of public transport to minimise the call on oil reserves, the local levels of which are declining at a significant rate, and to enhance the urban environment and quality of life for the Melbourne community. Public transport needs to be of a standard which presents a real alternative to use of the private car.

2.1.2 Residential Development

The Metropolitan Policy will encourage higher residential densities in established areas, particularly inner and middle suburbs. New development will be concentrated initially in the Plenty Corridor in the north and then in the Berwick-Pakenham Corridor in the south-east as shown in Figure 2.1. Major growth will occur in the west, centred on the expansion of Melton and Werribee and new developments in Keilor and Sunshine, including the Albion site. Sunbury is also expected to continue to expand.

New fringe developments will also occur in Craigieburn in the north, around Lilydale in the east and on the Mornington Peninsula.

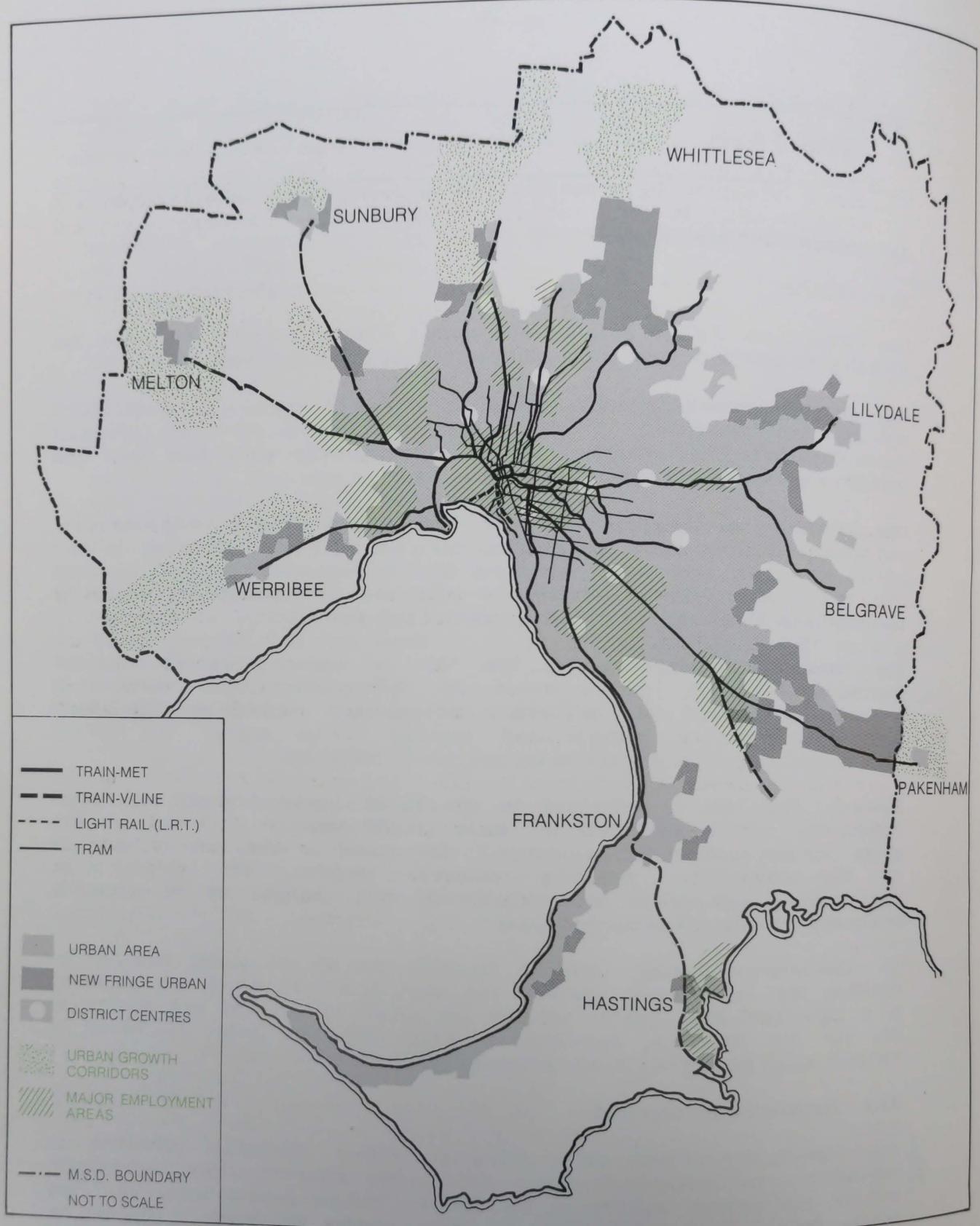


FIGURE 2.1 Future Urban Development

2.1.3 Population

The population of Melbourne is expected to grow from 2.94 million currently to around 3.4 million by 2003. The population of inner and middle suburbs is expected to decline by about 8%. As a result, some 500,000 people will be seeking to settle in outer suburbs and newly developing fringe areas and the urban area will grow in size by about 10%.

Households will change in composition. Already single parent, childless couple, group and single person households constitute over 40% of households.

2.1.4 Employment

Total employment in all metropolitan regions is expected to rise in the next fifteen years.

Manufacturing employment is expected to grow by 15%. Much of this increase will take place within existing industrial zones shown in Figure 2.1.

One third of all Melbourne's job opportunities are located in the eight municipalities which make up the inner region, with 13% of all metropolitan jobs in the Central Activities District. Over the next fifteen years, the inner urban region will continue to have the greatest concentration of metropolitan jobs. Employment in the Central Activities District will continue to grow although jobs will become increasingly specialised, focussing on service and finance sectors.

There will be modest growth in office-based and retailing employment in the District Centres and in the eastern suburbs, and general growth in office and service employment throughout suburban Melbourne in line with changes in population patterns. New jobs will be created in the outer suburbs as new schools and other community facilities are developed with fewer jobs in the areas of declining population. District Centres are expected to experience major growth for shopping, recreation and entertainment purposes.

2.2 THE NATURE OF THE TASK

2.2.1 People Dependent on Public Transport

Recent surveys have shown that some 60% of Met customers are dependent on public transport. They are people living in households without cars, people under driving age and people over 70 years old; they comprise some 53% of the population. Changes in the population structure and increasing car-ownership mean that the proportion of the population dependent on public transport will decline, but the actual number of people dependent on public transport will remain static.

-6-

The Met will continue to provide services which offer mobility and access to services, employment and recreational opportunities for those dependent on public transport, and to improve such services cost effectively.

2.2.2 Students

Students are the largest group of people dependent on public transport. Young people make up 29% of the population but 40% of Met customers. Most travel is to and from school. Student travel currently places greatest strain on the bus network in outer areas and parts of the train and tram networks.

The total number of school-aged children is expected to continue to decline slightly but a higher proportion will be living in outer and fringe areas. Changes in the location of schools and organisation of the education system will impact on student travel demands. There needs to be close co-operation between The Met, the Ministry of Education and school authorities to ensure that decisions on school re-organisation take account of their impact on Met services and costs. The Met will continue to provide for education travel in a cost-efficient manner following consultation with school authorities and the Ministry of Transport.

2.2.3 Elderly People

Low level use by people in the over 70 age group is partly a result of physical and other barriers imposed by conventional public transport vehicles and service patterns. Many local councils operate special services to cater for the travel needs of the elderly, which help overcome some of these barriers.

The number of elderly people is increasing across the metropolitan area with highest growth rates in outer and fringe areas. To provide for their travel needs in a cost-effective manner, The Met will examine changes in bus designs and service patterns.

2.2.4 Central City Commuters

Central City commuters are the single largest market for Met services. The central city, particularly the Central Activities District (CAD), will continue to play an important role in the economic life of the city. Currently some 50% of people working in the Central Activities District travel by public transport. The Met will seek to increase this market strategy.

The percentage of commuters using public transport falls sharply outside of the Central Activities District despite the high density of services available. The Met will seek to increase substantially the number of commuters using public transport to destinations in the Central Area outside the CAD.

2.2.5 Suburban Commuters

Outside the Central Activities District about 10% of journeys to work are made by public transport.

The continuing concentration of employment opportunities in District Centres and established manufacturing zones provides the opportunity for The Met to capture a greater share of the suburban work travel market through better matching of suburban routes and timetables to these travel demands, and more cross-town services. The Met will target to exploit this opportunity to increase patronage.

2.2.6 Other Trips

Relatively few people, including those dependent on public transport, use it for journeys other than to work and school. Obtaining an understanding of the travel needs of these people, and of those who do not use it at all, is necessary. Travel requirements for shopping, recreation and entertainment should be examined.

Increasing the use of the system off-peak during the day for such trips provides an opportunity to increase revenue without imposing extra costs.

The Met will target to exploit this opportunity to increase patronage.

3. THE VISION

3.1 PATRONAGE TARGET

Achievements in attracting riders to The Met during the past six years give reason to believe that further service improvements will also lead to patronage growth. Analysis of the various factors affecting patronage and recognition of constraints on the level of resources likely to be available for service improvements suggest that a patronage growth of 20% over 15 years is realistic and achievable. This is the patronage growth target set for MetPlan.

The expansion of the heavy rail network would lead to a 30% patronage increase on that network. Similarly the expanded bus network will carry a significantly increased number of passengers. The Light Rail network and other extensions to the tram network would counter any decline in usage of these modes resulting from the expected population decline in the inner suburbs.

This patronage target will be achieved by efforts to increase the public transport share of specific travel markets:

- . Commuters;
- . Off-peak travel;
- . Travellers to major events;
- . Shoppers;
- . Tourists.

The requirements of the public, both users and non-users, need to be determined to ensure services provided are responsive to people's needs, and the benefits of travel on The Met promoted. The image of The Met needs to be raised, especially to attract those who may currently consider The Met an inferior mode of travel.

The goal will be to provide and present a viable alternative to travel by car, removing the need for households to buy a second car.

3.2 THE OVERALL SYSTEM

To achieve this goal, The Met will continue to operate an integrated network of train, Light Rail, tram and bus services, with two main elements:

- . One for longer-distance movements, particularly for commuting to the central city, made up of the existing train network (and extensions), a new Light Rail Transit (LRT) network and a new network of cross-town bus routes (MetLink) linking District Centres and other major employment centres; and
- . the existing bus and tram networks (extended and enhanced as necessary) to provide for local, shorter-distance radial and cross-town movements, including feeder services to the train, LRT and MetLink networks.

Strategies for development and improvement of these networks are set out in Sections 3.3 to 3.6. Options for major extensions and enhancements to the network to support the Metropolitan Policy are described in Section 4.

Successful operation of the whole system will be dependent on:

- . provision of a reliable service which is easy and enjoyable to use;
- . provision of most appropriate mode including taxis where appropriate;
- . better and more widely available passenger information, especially to non-regular users;
- . integration of timetables;
- . purpose-built interchanges;
- . a simplified fare system;
- . a new and simplified ticketing system;
- . improved passenger security;
- . higher standards of building and vehicle cleanliness;
- . good staff/customer relations;
- . reduced costs.

Strategies for these areas are outlined in Section 3.7 to 3.10.

Future developments of The Met system must take account of current developments in technology. The Met will continue to review recent innovations in other parts of the world to identify technologies which would reinforce the speed and convenience of the service and minimise impact on the environment. These studies will include latest developments in light rail infrastructure and light vehicle construction for both rail and road vehicles.

Selected technologies will be introduced to selected parts of the system in a way which will allow controlled evaluation of public acceptance and operational efficiency.

3.3 THE HEAVY RAIL SYSTEM

3.3.1 Service Strategy

Increases in operating speeds and reduced journey times for passengers will be the goal in the next few years. This will be achieved through a combination of improvements to track and signalling, the removal of bottlenecks and the introduction of more express services.

All train services will operate from 6.00 a.m. until midnight.

Timetables will be reviewed. The use of regular interval, clockface schedules will be extended with minimum service frequencies of 20 minutes at peak and 30 minutes off peak. A minimum 30 minute service would apply on Saturdays and Sundays. Higher frequencies would be provided at any time according to demand. Three-car trains will operate where passenger demand does not justify six-car trains.

The target for service delivery will continue to be that 98% of scheduled services are operated and 95% of services will operate within 5 minutes of the published time. Common loading standards will be applied across the networks, and extra services provided to maintain these standards as demand increases.

Lines will be operated in groups to improve reliability and reduce the potential for disruptions on one line affecting other lines. For example trains and crews would be dedicated to the Altona-Werribee-St. Albans-Broadmeadows group of lines to maximise services and standards on these lines at all times.

The maximum possible number of services will operate via the Loop. Cross-platform interchange facilities for passengers wishing to travel direct to Flinders Street already exist at Richmond Station for passengers on the Ringwood, Glen Waverley and Alamein lines. The provision of cross-platform interchange there for passengers on the Sandringham, Frankston and Pakenham lines and at North Melbourne Station for passengers on the Broadmeadows, St. Albans and Werribee lines will be investigated.

3.3.2 Stations and Interchanges

Major modal interchanges will be provided at District Centres and focal points of local feeder services.

Car parking will continue to be expanded. The target is to double the rate of construction to 2,000 spaces per year. Emphasis will be placed on the creation of motor stations where large areas of parking can be provided at low cost without disruption to the environment and without adverse impact on local traffic. Moorooldale (between Lilydale and Mooroolbark), Watsonia, Baxter and Sydenham have already been identified.

Stations will be integrated into the local community. Shops and other facilities like automatic banking, newsagencies, dry cleaning and 24 hour convenience stores will be encouraged for the benefit of travellers. Entertainment facilities, professional suites and offices, medical and welfare services will also be encouraged. Increased usage of stations provides for the safety of travellers and other users of station facilities.

At District Centres developments will be planned over or adjacent to rail stations where feasible. Projects for Broadmeadows and Glen Waverley are underway. Proposals for Ringwood are under consideration.

Spencer Street Station is the main interchange point between V/Line country and interstate services and The Met. The development of a country and interstate coach terminal at this location will reinforce this role. This terminal will be built at Spencer Street Station.

Stations will be examined in conjunction with local authorities and private developers where appropriate, to ascertain their potential for development and integration into adjacent shopping and employment centres. Local Councils will be encouraged to take a more active role in the design of the stations, and in design and maintenance of the surrounding areas. Every station and interchange has potential for development along these lines.

Local government and local community organisations will be invited to be involved in projects for the improvement and protection of stations in their areas. The objective would be to engender a spirit of community ownership and interest in local stations. They would be invited to make suggestions and The Met would consult them about proposals it had in mind for particular stations. Relevant staff and their unions will also be encouraged to participate in this process.

3.3.3 Infrastructure

A major rehabilitation of the overhead electrical supply system will be completed in late 1989. The program of thermit welding to provide continuous welded rail, giving a smoother ride, should be completed two years later. Attention over the next five years will be given to improving the power supply control system.

Once the major catch up programmes have been completed, a regular programme of preventative maintenance will be required. Attention will also be given to upgrading the signalling system. The remaining semaphore signalling and mechanical interlocking will be replaced by electric colour light signalling with solid state interlocking.

3.3.4 Maintenance Depots

Decentralisation of train maintenance and stabling facilities from Jolimont to suburban locations is underway. The initial depot at Epping will open in 1989, thereby releasing land in the Jolimont area for redevelopment. Sites for other depots are now being investigated. These new depots will provide considerable improvements to permit preventive maintenance of the train fleet (leading to improved reliability) and in the working conditions of staff. Secure stabling sites near rail terminals will also provide for more efficient operations.

3.3.5 Rolling Stock

By mid 1989 the fleet will consist of 95 air-conditioned Comeng trains and 58 silver trains. Some 135 trains are currently required in service to meet peak schedules.

Comeng trains will run throughout the day on all lines, supplemented at peak periods by Hitachi trains. Hitachi trains will be refurbished.

Service expansion and patronage growth on the existing network will require 40 new six-car train sets over the fifteen year period, 10 of which will be required in the first five years. Double decker trains will be used on the most heavily used lines, notably the Ringwood and Pakenham lines, where appropriate.

The Met will continue to develop vandal-resistant seating and decor. Materials engineering and ergonomic developments are expected to provide positive results.

Improved physical security for trains parked at decentralised suburban sites will be provided to reduce exposure to vandalism.

3.4 THE LIGHT RAIL SYSTEM

3.4.1 Service Strategy

Building on the success of North-South Light Rail, new lines will be developed to form a comprehensive Light Rail network. Existing tram lines will be upgraded to Light Rail where there are heavy passenger loadings on long routes and where the lines already run, in large part, on reserved rights-of-way in the centre of roads. More reserved rights-of-way and use of the median of freeways will be examined.

The network will consist of a number of routes including the North-South LRT link. Options for the establishment of routes are described in Section 4. The strategy in developing a Light Rail network is to provide for radial movements, particularly to the central city, in those corridors not serviced by trains, with a standard of comfort and journey speed comparable to that of trains.

The standards for service delivery will be commensurate with those for train services.

As with the train system, interchanges will be developed at locations where major areas of car parking and interchange with feeder bus and tram services are necessary.

Stops on the Light Rail network will be more widely spaced than on the tram network. The service will be operated by articulated Light Rail Vehicles, coupled where demand warrants.

The establishment of Light Rail services from existing tram and train lines will require changes to existing tram and bus services to cater for local movements.

The use of ballasted track will be considered for light rail (and tram) services operated in their own right of way.

3.4.2 Vehicles

A new design of vehicle will be developed with low floor heights to permit wheelchair access. Like the train network, the Light Rail network will be made accessible to people in wheelchairs. No Light Rail conversions will proceed before wheelchair accessibility is addressed.

In the development of vehicles suitable for Melbourne conditions, in service trials will be conducted using vehicles currently entering service overseas, and market research conducted on customer attitudes.

3.5 THE TRAM SYSTEM

3.5.1 Service Strategy

Adjustments may be required to the tram network to take account of the conversion of routes to Light Rail. The precise nature of these changes will be the subject of consultation following detailed passenger surveys.

Extensions to the network will be built to link District Centres and to overcome discontinuities in the existing system, as described in Section 4.

The standards for service delivery will be commensurate with those for train services.

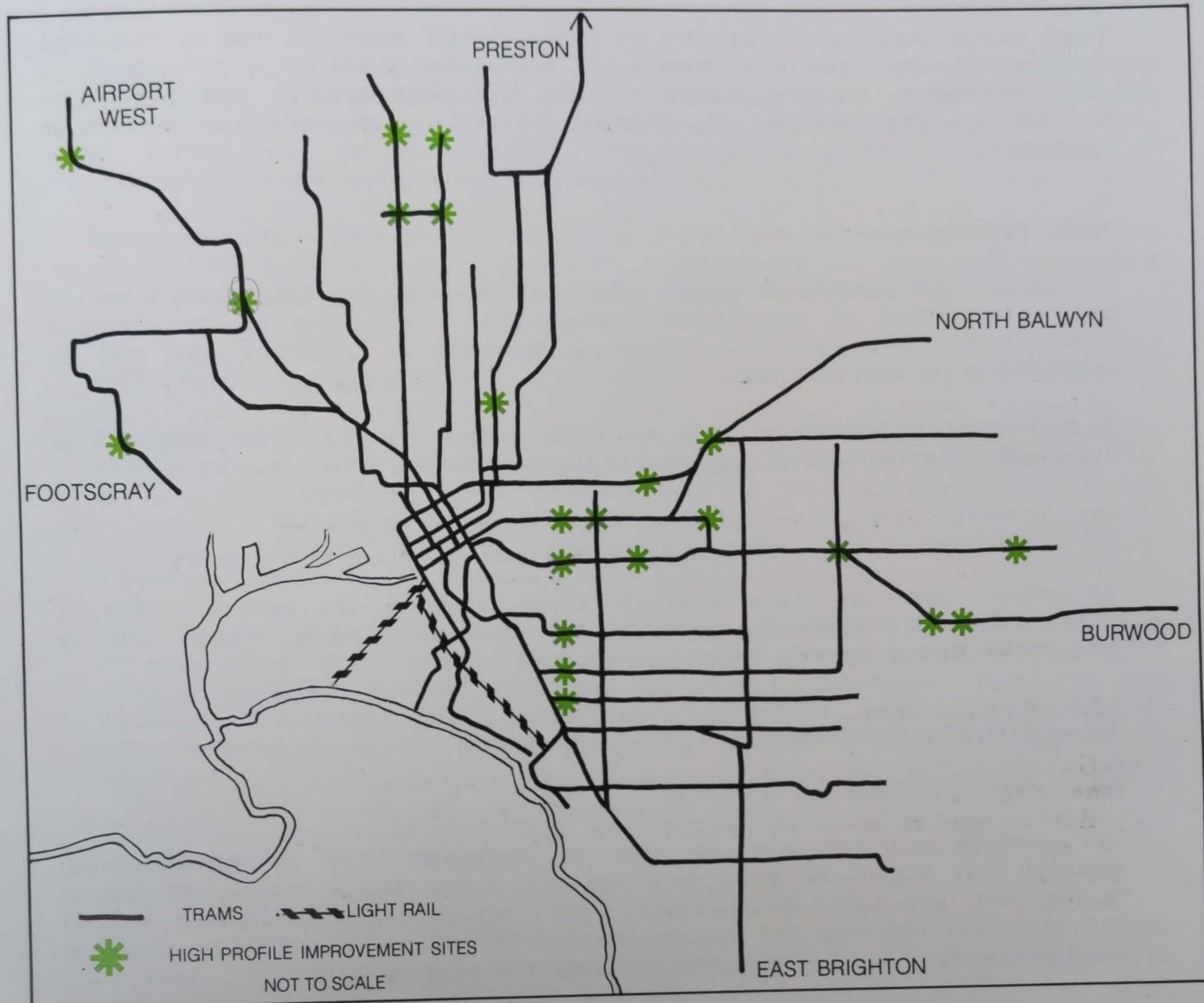
The Fairway program has resulted in decreased travel time and improved reliability on many tram routes. Time savings can reach 25% depending on routes and areas. As there is a risk of deterioration of the benefits over time, on-going monitoring and adjustments to the system are necessary.

The Fairway II program will rectify sites with high tram delays and/or operational problems. Intersection widening and safety zone installation will be undertaken. High profile improvement sites are shown in Figure 3.1. Co-operation with road authorities and local government is essential.

Automatic Vehicle Monitoring (AVM) will be extended to cover the operational fleet with consequent improvements in operating efficiency and passenger security. AVM will also be used to provide passenger information, on vehicle and off vehicle, through the Transport Information Centre and Viatel.

Melbourne trams have been recognised as an important asset for tourism. Tram routes link with most major tourist centres in the inner suburbs and provide an ideal way to discover Melbourne. More tourist kits will be developed.

FIGURE 3.1 Fairway II Program Improvement Sites



3.5.2 Tram Depot Upgrade

Tram depots need to be upgraded to improve staff amenities and to modernise facilities to cater for new trams and Light Rail Vehicles. A program is being developed for all depots. This will also consider the commerical development opportunities at depots located in or adjacent to major centres.

3.5.3 Infrastructure

Substation and overhead wire rehabilitation requires increased attention and a programme of preventative maintenance. Conversion of the overhead system from trolley pole to pantograph operation is underway and will be completed in the next five years.

A programme to reconstruct tram tracks is underway and will be expanded to provide the required level of preventative maintenance and service quality.

3.5.4 Vehicles

At present there are many older (W Class) trams in the system. Most of these will be progressively replaced by articulated trams which will be assigned to the most heavily loaded tram routes.

3.6 THE BUS SYSTEM

3.6.1 Service Strategy

Bus services will continue to play an important role in serving those journeys that cannot be made on fixed rail routes and in acting as feeders to the train and Light Rail network. They are important in proving demand and can meet changing and special demands that do not justify investment in fixed rail (such as moving large crowds infrequently or irregularly).

Buses will operate on all routes on weekdays at least from 7.00 a.m. to 8.00 p.m. MetLink services which meet minimum loading requirements would operate through to midnight. Before 7.00 a.m. and after 8.00 p.m. in the outer suburbs, a network of bus feeder services would operate to LRT and MetLink modal interchanges and selected train stations, perhaps using demand responsive bus services or taxi services on contract to The Met.

Minimum weekday service frequencies would be 30 minutes. Higher frequencies would be provided according to demand. On weekends, a selected network of bus routes, including all MetLink routes, would operate 7.00 a.m. to 8.00 p.m. with at least a 30 minute frequency on Saturdays and hourly on Sundays.

The target for service delivery will continue to be that 98% of scheduled services will be run.

More shelters, offering protection from the weather, and illuminated, will be provided. An expanded program will be developed in conjunction with local councils, starting with the most heavily used locations. New types of shelter will be investigated, incorporating telephones and capable of providing passenger information using electronic equipment.

Improved vehicle supervision, similar to AVM, will be extended to cover the whole bus network, with consequent improvements in operating efficiency, passenger security and passenger information on and off vehicles.

3.6.2 Service Development

Emphasis will be given to providing services to District Centres and major suburban employment areas to cater for local travel needs. Services for social and recreational travel demands will be introduced at evenings and weekends. Education travel will be provided in a cost efficient manner following consultation with school authorities and the Ministry of Education.

The recent examination of bus services (RedBus) in the Moorabbin Neighbourhood demonstrated that with service redesign, improved services can be provided through better use of existing resources. Based on this experience, redesign studies will be progressively undertaken across all Met Neighbourhoods to provide improved services without an increase in resources.

Preliminary studies indicate that an increase of 33% in bus service (i.e. seat/kilometres) is required to provide an acceptable standard in newly developing areas.

Extra services will be provided by a mixture of Met operated and contract services. Services to be provided by private operators will be subject to competitive tender. The Met will be encouraged to tender for these services in competition with private operators.

3.6.3 Metlink

A network of long-distance cross-town bus links will be developed to complement the fixed rail networks. They will run on arterial routes between District Centres, other regional employment centres and major modal interchanges. Vehicles used will offer a standard of service and comfort, including seating and air conditioning, comparable to that offered on trains. Use of coaches will be considered on longer routes. Some services will run express or with limited stops in peak periods. Bus only lanes will be developed.

Quality co-ordination with local bus services and fixed rail services would be a feature, as would a distinctive and consistent MetLink livery. In some areas, existing cross town links will be upgraded to MetLink services, whilst in other places MetLink services will be additional to existing services.

Outline MetLink bus proposals are shown in Figure 3.2.

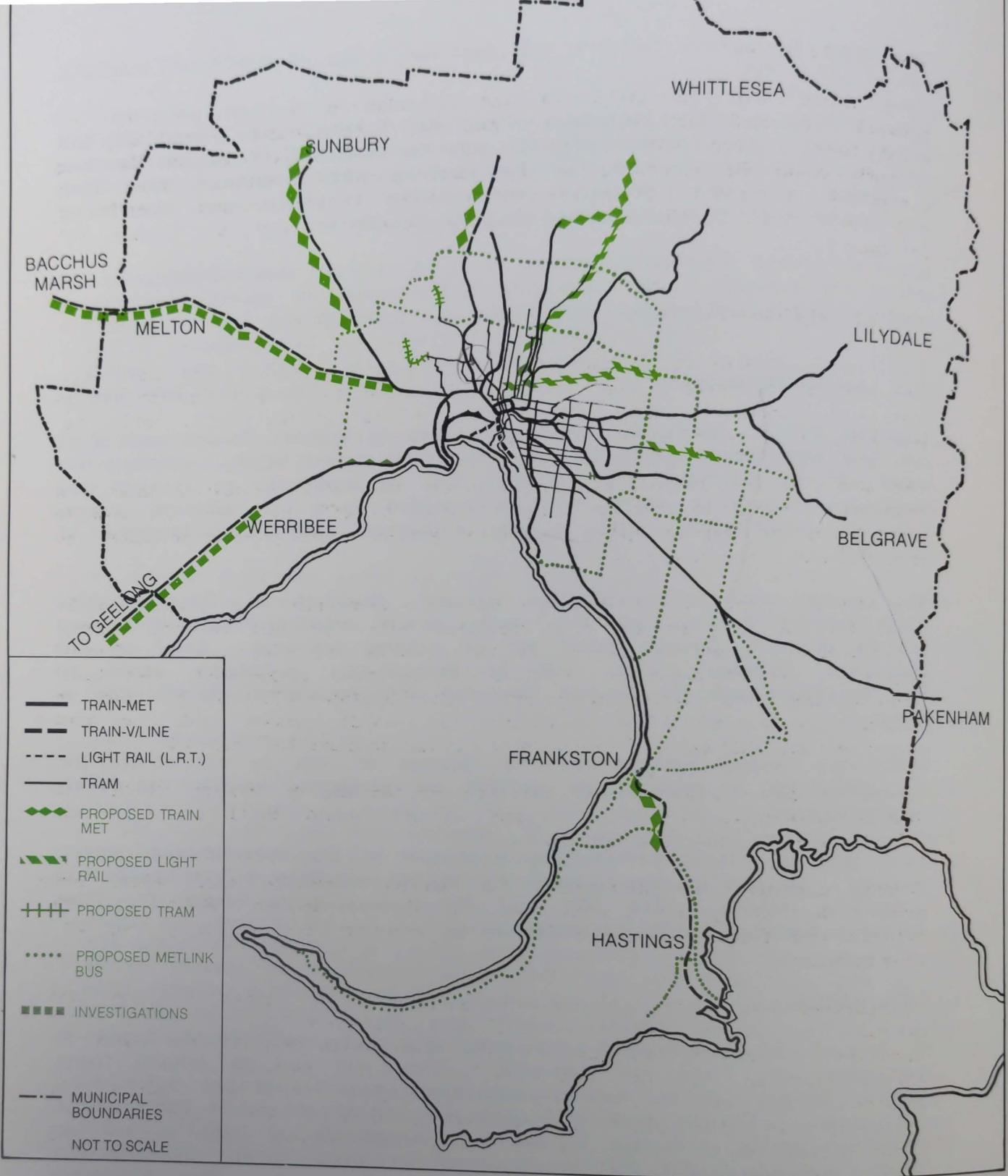


FIGURE 3.2 MetLink Bus Proposals

3.6.4 Night Services

Consideration will be given to the introduction of an all-night bus network. Selected MetLink services and radial bus routes in rail corridors could form a core network for all-night services. Services on the core network could be complemented by local zone-based services using taxis contracted to provide demand-responsive links between modal interchanges and homes. All-night services could operate initially on Friday and Saturday nights.

3.6.5 Local Networks

Local networks will be designed to act as feeders to rail, Light Rail, tram and MetLink networks. They will provide access to District Centres and to more local commercial and civic centres. As far as practicable, feeder bus timetables will be co-ordinated with train timetables.

The Met will also support community groups who wish to develop their own transport solutions to local mobility problems by offering advice on how to proceed and by linking up of individual groups where possible to allow the most efficient use of resources.

The Met will need to examine ways by which community bus services run by Local Councils can be better co-ordinated with The Met network. Local network design including the use of smaller midi and mini-buses and demand responsive services needs to be developed in close co-operation with Local Councils and other interested groups. Consideration will also be given to making vehicles wheelchair accessible, to provide persons with the most severe mobility difficulties improved access to the train and LRT network.

Service in outer areas can be improved by the use of smaller vehicles for demand responsive services. These services would build on experience gained in the Chirnside, Mooroolbark area.

Demand-responsive (or dial-a-ride) bus services can be used where low demand does not justify a conventional fixed route service. Routes can run between two fixed points and deviate as necessary en-route to pick-up and drop passengers.

Conventional bus or demand responsive minibus are not always the most cost effective means of providing services, particularly in developing outer areas and at times of low demand. The metropolitan taxi industry which has surplus capacity outside peak periods, could participate in market-responsive services. The Met will encourage the taxi industry to participate in developing cost-effective services. For instance, taxis could provide night services in designated zones around major stations and interchanges using share-ride or Met tickets.

3.6.6 Vehicles

Bus replacement policies will favour regular upgrading to incorporate technological innovations and to maintain an acceptable level of comfort and ease of use.

In The Met operated fleet, the next vehicle order will be for higher capacity rigid buses, articulated vehicles or double-deckers to be used on the most heavily loaded routes from 1990 on-wards.

In both The Met and contract bus fleets, a mix of vehicle types will be required, ranging from articulated or other high capacity vehicles for school services and trunk routes to 16-seat purpose built mini-buses and 23-33 seat midi-buses for service on low density routes, particularly in outer suburbs. Careful management of the size of the bus fleet and the mix of vehicles within it will be important to cost-effectiveness and the range of services which The Met can provide.

The specification including new technology of Met buses will be examined to reduce purchase and operating costs while maintaining passenger comfort and convenience. All new vehicles will be designed to provide cost effective standards of passenger comfort, floor height, ease of boarding and passenger information systems. Preliminary studies suggest that passenger comfort and safety can be maintained at lower cost through introduction of new design buses. Options for construction of buses by Met Workshops will also be examined.

3.6.7 Bus Priority and Infrastructure

The Fairway system has demonstrated for the tram network what can be achieved by priority measures and traffic signal linking. Currently only one bus lane in Johnston Street, Collingwood gives signal co-ordination and priority for buses.

A program will be developed to speed up bus services, through introduction of bus lanes, signal priority at traffic signals, re-routing of buses in the CAD and exemptions from turn bans. Initial efforts are being focussed on measures for services into the CAD from the Doncaster/Templestowe area along the Eastern Freeway.

In addition, road improvements such as bus bays at stops, standing and turning facilities, bus/rail interchange facilities, car parks on MetLink routes and improvements to local, regional and District Centre roads will be examined. Funding arrangements for such facilities will also be examined.

3.6.8 Depots

The recently completed Northcote Depot provides modern facilities for the maintenance of all Met operated vehicles. The Met Depots at Doncaster, Footscray and North Fitzroy will continue to be upgraded to improve staff amenities and to modernise facilities to cater for new vehicles. Consideration will be given to a major upgrade of Elwood Depot, or its resiting to another location. Expansion of Met operated services will require provision for new depots in newly developing areas in the Plenty Valley and the Berwick Pakenham Corridor.

3.7 SYSTEM WIDE IMPROVEMENT INITIATIVES

3.7.1 Interchanges

The prime purpose of an interchange is to provide safe and comfortable conditions for passengers changing between vehicles. Types of interchanges will vary widely depending on the volume of traffic, transport modes being connected, the availability of land and the environs.

Bus/train interchange facilities already exist at train stations in District Centres, but most require major improvements. They provide an opportunity for commercial development of retail, entertainment or office accommodation where land is available. Such developments, particularly when they stimulate off-peak activity, provide in themselves a flow of people which improves security for public transport users and creates potential for increasing Met patronage. Commercial development would also offset Met costs of providing interchange facilities. This opportunity also exists at a number of other locations on the train network as discussed in Section 4. The Met will examine, in consultation with the local community, the development potential of each proposed site and the cost and sources of funds.

The bus/tram interchange at La Trobe University is an illustration of the type of facility that could be developed at a number of locations on the LRT system.

Simple bus/bus interchanges (bus stations) exist at a number of regional and smaller shopping centres. The Met will examine, in conjunction with the centre management and the local community, the potential to improve these interchanges and the cost and source of funds.

3.7.2 Passenger Information Systems

Pocket rail, tram and bus timetables will be produced in easy to read formats. Timetable information will be available through the Transport Information Centre and sales outlets.

A computerised facility to inform travellers of the quickest and most convenient Met routes and services for their needs will be installed in the Transport Information Centre and the Met Shops.

System maps and timetables will be provided at rail stations and interchanges and at bus and tram stops where shelters are provided. Route maps and timetables would be displayed at most bus and tram stops, or alternative means of supplying this information by telephone or Viatel developed.

The information provided on trains, trams and buses will be improved. On-train announcements including next station, connecting services, etc., could be provided automatically. On trams, LRV's and buses, similar route maps could be provided, and similar announcements given automatically from the AVM facility.

By combining the use of information from AVM and Viatel, it will be possible to provide people in their homes with details of the arrival or departure time for buses, trains and trams serving their location. They would be able to judge when to leave home or the office to catch or meet the bus, tram or train with a minimum of waiting at a stop or station. At railway stations and selected bus and tram stops the time of the next departure would be displayed by visual display unit and announced automatically.

3.7.3 Security

The security of passengers while travelling and while waiting for public transport is a prime concern. The Transit Police and Transit Patrol will be a primary means for ensuring the security of Met patrons, staff and property. Existing levels of 66 police and 152 patrol officers will increase to 230 and 170 respectively by mid 1990. They will operate as an integrated unit and resourcing requirements will be kept under on-going review.

The role of the guard will be enhanced to provide a person who is both visible and accessible to passengers. It is proposed the guard will patrol the full length of the train moving from car to car in a random manner. The presence of the guard roving on the train would enhance passenger security and it is anticipated this will result in increased patronage, reduced vandalism and increased work satisfaction.

An increase in the Police Dog Squad will be examined so that police dog patrols of vehicle stabling areas can be introduced.

The Transit Police/Transit Patrol will have direct radio links into the D24 network. They will have a high priority to significantly reduce wilful damage to Met vehicles and installations.

Geographical Victoria Police Districts within the metropolitan area will complement the Transit Police/Transit Patrol activities with both mobile and foot units patrolling stations, interchanges, stabling yards, etc. on a random basis.

The aim of radio and TV communication systems at interchanges and stations and on vehicles is to establish a 10 minute maximum time standard for police to report to a particular incident.

The application of CCTV as a means of enhancing passenger security and reducing vandalism will be actively pursued on trains, articulated and double-decker buses as well as at stations and interchanges. CCTV has already been introduced at Box Hill, North Melbourne and underground stations.

COMMUTER WATCH the public transport arm of NEIGHBOURHOOD WATCH has been introduced. It will be nurtured in the same way to capitalise on the public interest in and commitment to public transport security.

New buildings (particularly stations and interchanges) will be designed to maximise the security of patrons, the building and associated facilities. The visual relationship of the ticket office to the general waiting area and other public areas will be designed to allow CCTV or visual surveillance.

High standards of lighting will be provided on all stations, interchanges and approaches and at bus and tram stops.

3.7.4 Cleanliness

The cleanliness of trains will be given special attention. Vehicle cleanliness is important to customer satisfaction and patronage growth.

Installation of fire and vandal resistant receptacles for litter and rubbish on stations and vehicles will be explored.

A graffiti cleaning squad additional to standard cleaning resources has been established and will be maintained specifically to remove graffiti from trains. The possibility of mobilising part of the squad to remove graffiti from trains actually in service will be explored. Works programs will be specially designed to maintain cleanliness at stations and to minimise defacement through graffiti.

Public awareness programs through the media particularly radio have been designed and will be used to discourage graffitists. Community-wide educational programs like the successful "Keep Australia Beautiful" campaign will be undertaken.

Advertising on trains has commenced and will be developed. It will reduce space available to graffitists. Advertising panels are being designed to resist spray paints as well as being readily replaceable. Advertising will feature Met material (including anti-graffiti material), general community information and commercial advertisements similar to those in buses and trams. The aim is for advertising to be profitable or at least cost neutral.

Telephone hot-lines have been installed to allow Met staff and the general public to report graffitists and/or to make suggestions to overcome the problem. Suggestions made will be actively explored.

The Transit Patrol Community Relations Unit will continue and expand its school visits program and place particular emphasis on encouraging cleanliness and the value of public maintenance of Met facilities.

A Community Committee on Graffiti has been established with representatives from Government (including Police, Youth Affairs, Education, Arts), youth organisations and parents.

Community standards for cleanliness of all Met facilities will be applied as a minimum. People wilfully littering or otherwise defiling or defacing Met property will be acted against in the same way as would occur for similar offences elsewhere in the community. Offenders subject to Community Service Orders will be used to clean stations.

Non-smoking requirements on Met vehicles will be enforced.

3.7.5 Bicycle Facilities

Bicycles are an important mode of access to railway stations. With more better equipped and better designed bicycle storage facilities at railway stations, there could be an increase in bicycle/rail commuting. Similarly, the provision of bicycle storage facilities at key locations on light rail and bus routes, facilitate bicycle/LRT and bicycle/bus commuting.

The Met will continue to implement the recommendations of the report on bicycle facilities at railway stations prepared in 1986 and will increase the rate of provision of secure bicycle lockers and explore other ways of providing bicycle storage facilities at railway stations. Consideration will also be given to provision of secure, well designed bicycle storage facilities at key locations on the LRT, tram and bus network.

3.8 ACCESSIBLE TRANSPORT FOR PERSONS WITH DISABILITIES

Persons with some form of disability which can act as an impairment to their use of public transport services, currently constitutes some 15% of the population. The majority of these people are also over sixty years old. Both the percentage and numbers of such persons are expected to increase over the next 15 years. Persons with the most severe mobility impairments that require them to use wheelchairs comprise only a small proportion of this 15%. Major groups of persons with disabilities are those who have difficulty walking and those who are hearing and sight impaired.

Historically, the level of accessibility for persons with disabilities has varied between modes. People in wheelchairs, for example, are normally able to use the train system, but not the tram or bus systems. Supplementary services are also available. The Multi-Purpose Taxi Program provides 50% fare discounts and special vehicles (or Maxi Taxis) for those with disabilities.

The Met has a number of programs which specifically cater for the needs of people with disabilities. These programs include:

- staff training;
- information services such as teletype phones and braille maps;
- priority parking and seating;
- special toilet facilities;
- wheelchair ramps at stations;
- user training assistance.

A study commissioned by the Minister for Transport into accessible transport for persons with disabilities is due to present their recommendations later this year. Drawing on the interim recommendations of the study, The Met is developing an action plan to facilitate use of the existing system and vehicles. Specifications for new vehicle designs are also being developed and a Consultative Committee of persons with disabilities is being established to advise on requirements. One of the first tasks will be to produce specifications for low floor height light rail vehicles, and for any future bus orders.

As a parallel exercise to work being undertaken within the Access Study, The Met is considering the implications of the capital cost, operating cost and operating speed implications of the best means of providing a totally accessible transport system in metropolitan Melbourne. Decisions on whether the overall Met bus, tram, light rail and heavy rail system should be made totally accessible can, however, only be made in the context of the recommendations of the consultants, and decisions about funding arrangements.

3.9 FARES AND TICKETING SYSTEMS

The existing fare system will be radically simplified. The numbers, types, zone arrangements and relative pricing will be reviewed to arrive at a fare system which is simpler to remember and use.

A new and simplified ticketing system will also be introduced. The objectives of the new ticketing system will be to reduce delays in boarding trams and buses and queues at stations, to achieve efficiency in revenue collection and to make it easy for the public to use the system. The number of different types of ticket will be greatly reduced.

The existing multi-modal tickets will be retained so that people can travel on more than one systems with the one ticket. A review of ticketing will examine the expected benefits and ways of expanding the use of periodic tickets and ways of expanding the use of periodic tickets, forward purchase of multiple tickets and of increasing the numbers and types of sales outlets. The ticketing system will be operated through a system using appropriate technology and roving ticket examiners.

3.10 THE PEOPLE WHO DELIVER THE SERVICE

This vision will be attained only if all staff, operational, technical, professional, administrative and managerial share the vision and are equipped and willing to continue revitalising the organisation. All that has been described earlier in this chapter are ideas for improvement but it is the staff of The Met who will deliver the improvements.

The Met will therefore place high priority on the recruitment, training, staff communication and staff involvement in introducing improvements to the system.

3.10.1 Recruitment

The Met now provides a career for many of its employees. Long term career appointments require rigorous selection processes to ensure that applicants are well qualified for their intended roles and they are aware of the expectations of them from the outset. The Met will review its selection processes for all levels of recruitment to ensure an improved match between the person selected and the skills required.

3.10.2 Training

The training program of The Met will be reviewed to ensure that there is adequate provision for :

- technical training to equip staff to perform their essential roles;
- follow up and refresher training to ensure that staff are kept up to date;
- training and retraining to assist in occupational health and safety;
- retraining for staff who are required to change their roles or functions;
- training to support moves towards multi-skilling and broadbanding of duties;
- customer relations training aimed at equipping staff to satisfy the public's needs; and
- corporate awareness training to acquaint staff with the vision for The Met, the strategy for achieving the vision and the contribution expected of different staff members.

The Met will lift the profile of training so that staff are aware of training opportunities and of access to them.

3.10.3 Staff Communication

The Met currently publishes staff bulletins and newsletters. These will be reviewed to identify ways in which they can be used to inform staff of changes which might affect them and to reinforce the vision, strategy and the staff's role in assisting their attainment.

Managers and supervisors will also be encouraged to open up two-way communication with staff to allow staff participation to changes in their own areas.

3.10.4 Staff Participation

The Met recognises the wealth of knowledge and experience which its staff holds. It will work with employee organisations and staff groups to establish ways in which this potential contribution of staff can be brought to bear on improving service.

Selected pilot or demonstration improvement projects will be identified, for example station improvement, passenger information and vandalism, and participation processes will be used to establish goals and implement changes.

3.10.5 Manager and Supervisor Development

The current development program will be reviewed and expanded, as necessary, to ensure that managers and supervisors fully understand the vision and strategy of The Met and how they are expected to contribute, particularly through staff communication, participation and training.

3.10.6 Customer Relations

As described above, training, communication and supervision will be directed towards encouraging staff responsiveness to customer needs. In addition, a joint review will be carried out to identify other factors which contribute towards customer responsiveness by staff. This review will encompass costuming style and practices, decor and station and vehicle design and decor.

4. SHAPING MELBOURNE'S FUTURE - THE PUBLIC TRANSPORT OPTIONS

4.1 INTRODUCTION

Options for the expansion of services, and for the extension of the rail network have been identified in response to the metropolitan policy proposals in "Shaping Melbourne's Future". These projects would provide services to new areas of development, link District Centres, and improve access to concentrations of regional employment.

4.2 CENTRAL REGION

4.2.1 Network Options

The central region is characterised by a dense network of tram and bus routes as well as radial rail routes. The only expansion that could be considered is the North-South Light Rail from St. Kilda to Elwood and from Port Melbourne to Garden City.

Continuous efforts will be required to ensure that the service patterns on all modes match the changing travel patterns brought about by new developments and changing socio-economic conditions. Investigations will be required into making the most efficient use of existing resources and of increasing public transport mode share for trips to, from and within the central areas outside the CAD. The Upfield Corridor Project is an example of the investigations required. A Discussion Paper detailing options for providing an improved quality of service at a lower overall cost to the Authority will be released shortly.

There is also a need to consider the redesign of bus services in the northern part of the central area in conjunction with services in the neighbouring Broadmeadows and Greensborough Neighbourhoods. Detailed consideration will also need to be given to tram service patterns, of the CAD, to take account of the new developments particularly in the west and north, on Southbank, and the proposed Docklands Project.

4.2.2 Bus Routes

Increased priority measures and revised routing of buses will be implemented to speed the flow of buses to the CAD from the Doncaster/Templestowe/Warrandyte area via the Eastern Freeway. Similar measures will be considered for buses entering the CAD from the Westgate Freeway. To provide for more efficient bus operations within the CAD, revised routes and terminal arrangements will be developed.

4.2.3 Modal Interchanges

Improved quality of interchanges will be required at a number of stations within the central area, particularly to facilitate journeys to and from work places and other activity centres within the central area outside the CAD. Particular locations are North Melbourne, Clifton Hill, Richmond, South Yarra, Prahran and Windsor. A country and interstate bus terminal for both V/Line and privately operated services will be developed at Spencer Street Station.

4.3 WESTERN REGION (Refer Figure 4.1)

4.3.1 Network Expansion

The continuing expansion in the region will require a general expansion of bus services, and an increase in rail services on existing lines, together with measures to reduce journey times. There will be significant extensions to the urban area, particularly in the Werribee, Sydenham and Melton areas. Redevelopments are also expected in the region with the Albion site and the Williamstown Rifle Range being two major examples.

The following projects are proposed:-

- Rail duplication between Altona Junction and Laverton:**

This project will provide increased capacity to cater for forecasted increase in patronage. Greater capacity will enable improved frequency, faster services and greater flexibility in scheduling.

- Rail electrification from St. Albans to Sunbury in stages:**

This project will serve a total corridor population expected to exceed 100,000 within 15 years and a major new activity centre at Sydenham. Patronage would be up to 11,000 trips per day.

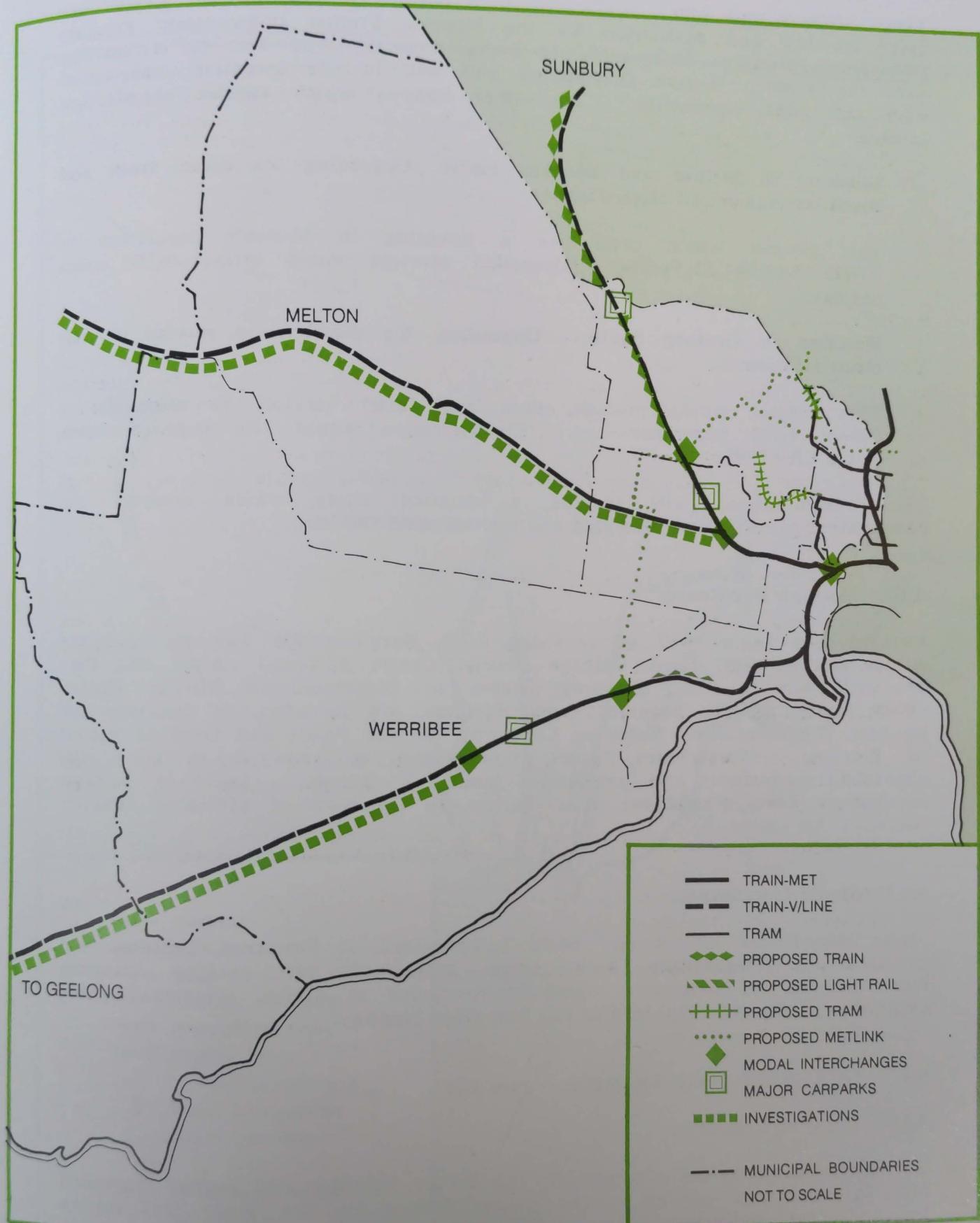
- Extension of tram route from West Maribyrnong to Avondale Heights:**

This project will serve a regional population of 20,000 and attract an estimated 2,000 trips per day.

- Extension of tram route from Essendon to Airport West:**

This extension will connect to Airport West Shoppingtown and serve an additional population of 10,000. It would attract an estimated 1,000 trips per day.

FIGURE 11 Western Region Projects



These projects and other public transport options in the Western Region are being assessed and prioritized by the Western Transit Improvement Program ("WestTrip") study. This study is being done by The Met in conjunction with the Western Region Commission and will include extensive consultation with the local community. The other options which require examination include:-

Sunshine to Melton and Bacchus Marsh. Upgrading the diesel train and coach services or rail electrification:

This project would cater for a doubling in Melton's population to 50,000 within 15 years. Upgraded services would attract 6,000 trips per day.

Werribee to Geelong South. Upgrading the diesel train service or rail electrification:

This project would provide more and faster services to cater for a future 4,000 trips per day. Electrification would also improve access to the City Loop.

These examinations will include a detailed study which analyses the comparative costs of diesel operated and electric train services.

4.3.2 MetLink Bus Routes

MetLink bus routes will be provided from Werribee, via Laverton and the Albion development, to St. Albans District Centre and rail station and then on past Airport West Shopping Centre to Broadmeadows District Centre. Other routes will be provided from Werribee, via Laverton, to Sunshine and on past Highpoint West Shopping Centre to Moonee Ponds and from St Albans to Preston. North-South routes would also be required to serve the expanding industrial and residential areas in Altona. Lack of suitable routes in this region.

4.3.3 Modal Interchanges

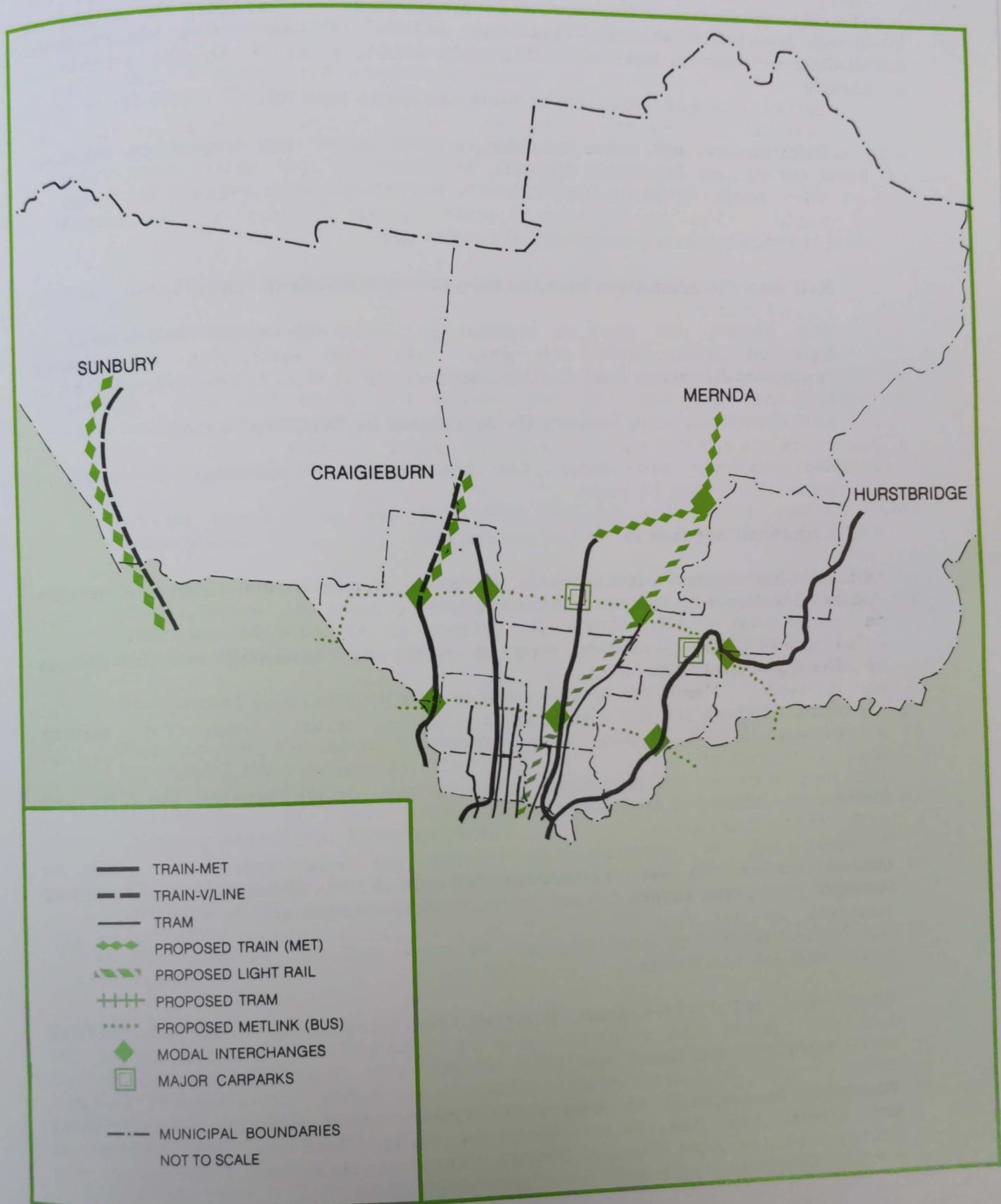
Major inter-modal interchanges could be provided at Footscray, Sunshine and Werribee. Interchanges with large areas of car parking, catering especially for car commuters could be developed at Albion, Hoppers Crossing and Calder Park, and at the end of the West Gate Freeway.

4.4 NORTHERN REGION (Refer Figure 4.2)

4.4.1 Network Expansion

The major development proposed in the Plenty Corridor will require expanded Met facilities and services. The Plenty Valley Corridor Study will resolve the needs, plans and priorities for the following extensions:-

FIGURE 4.2 Northern Region Projects



Rail electrification from Epping to Mernda via South Morang

This project will serve a regional population of 262,000 and attract an estimated 27,000 trips per day within 15 years. A major modal interchange with light rail would be provided.

Extension of Bundoora tram to South Morang as light rail:

This project will serve a population of 30,000 and attract an estimated 2,000 trips per day within 15 years.

Other network projects proposed for the region are:-

Rail electrification from Broadmeadows to Craigieburn in stages:

This project will serve a regional population of 46,000 and attract an estimated 8,000 trips per day. It will cater for the recently announced Roxburgh Park development.

Rail electrification to Sunbury (being assessed by "WestTrip" study):

This project will cater for the expected doubling of Sunbury's population within 15 years.

Upgrade of services in the Upfield corridor:

A study is now underway to devise a strategy which improves services and leads to efficiency improvements.

Upgrading the Bundoora tram to light rail, rerouting via St. Georges Road and Nicholson Street:

This project will significantly reduce travel times for existing patrons.

The long term option to provide a heavy rail service between the City and Melbourne Airport will be retained.

A study will be undertaken to identify the most appropriate means to upgrade service on the Hurstbridge line north of Greensborough, including the most appropriate feeder bus and interchange arrangements.

4.4.2 MetLink Bus Routes

Routes will be provided from Broadmeadows along Camp Road, interchanging with the Upfield line at a new stop at Campbellfield, with the Epping line at Keon Park, the Bundoora LRT at MacLeans Road and continuing onto Greensborough District Centre. This route could be extended on past Doncaster Shoppingtown to Ringwood. Further south a route, generally along Bell Street, will link Pascoe Vale, interchange with the Upfield line at Coburg and run past Preston District Centre to Heidelberg (interchange with the Hurstbridge line) and on to Doncaster Shoppingtown.

4.4.3 Modal Interchanges

Modal interchanges could be provided at Broadmeadows, Greensborough Moonee Ponds and Preston District Centres, at the Coburg, Heidelberg and Northland Centres, and at locations where the MetLink routes cross the North-South rail line. A major new interchange could be provided at South Morang to serve the Plenty Corridor.

A major car park will be provided at Watsonia using the land surplus to RCA requirements from the Greensborough By-Pass. Major car parks could be considered on the Upfield line at Campbellfield, and at Keon Park on the Epping line.

4.5 EASTERN REGION (Refer Figure 4.3)

4.5.1 Network Expansion

Fringe development in the region will require the extension of bus services. Upgraded heavy rail services and new light rail routes will cater for increasing demand from existing urban areas.

The following projects are proposed:-

- . Increase capacity on the Ringwood line by resignalling and/or double decker trains:**

Peak hour patronage is currently 15,000 and is expected to rise to 18,000 within 15 years. Additional capacity is needed to reduce the proportion of standing passengers and provide faster services. Various options need to be considered.

- . Extension of East Burwood tram to Knox City as light rail:**

This project will serve a regional population of 40,000 and attract an estimated 2,500 trips per day.

- . Construction of light rail from Nicholson Street to Doncaster Shoppingtown via the Eastern Freeway:**

This project will serve a regional population of 100,000 and attract an estimated 10,000 passengers per day.

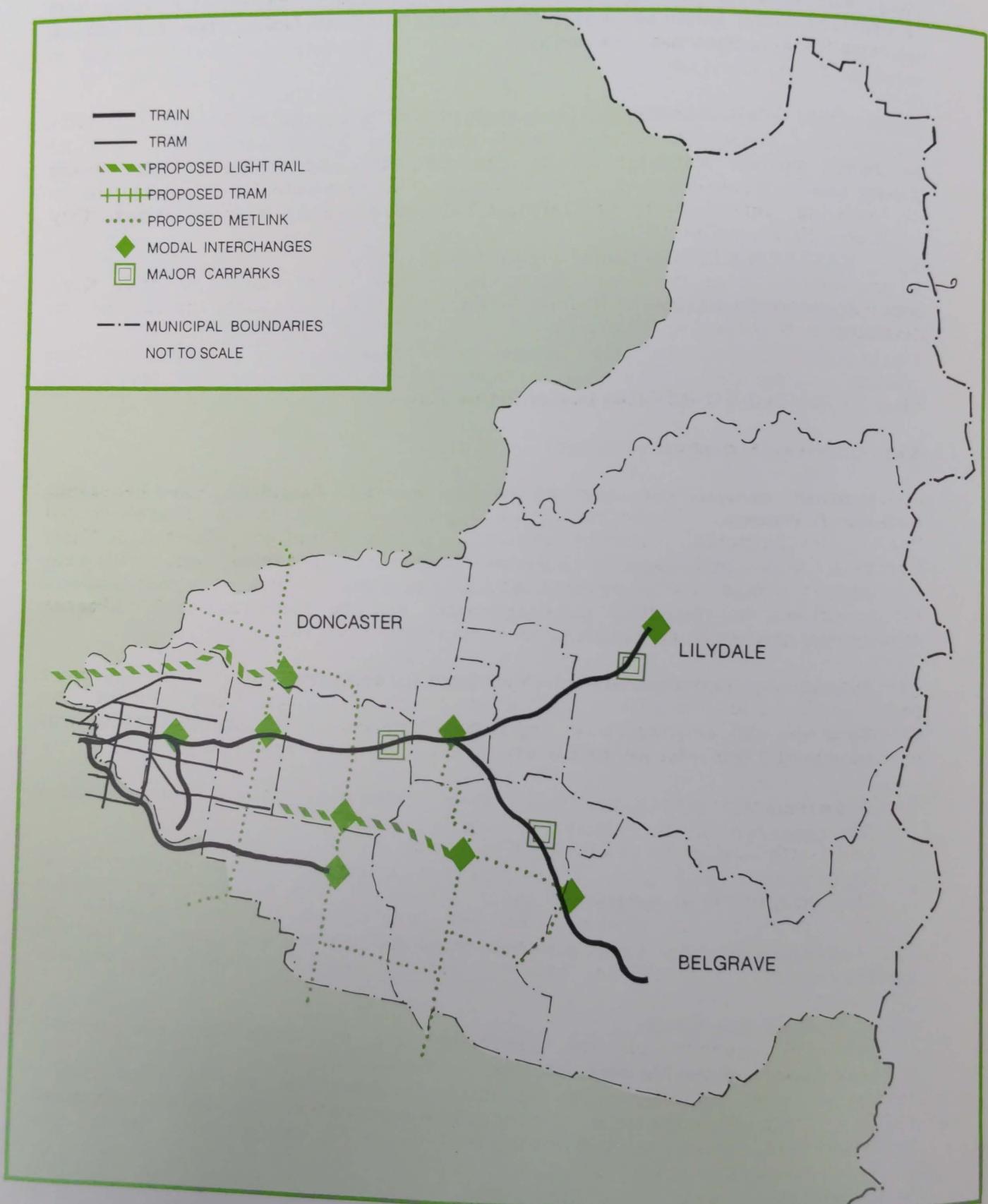
The upgrading of the East Burwood tram to light rail to the city will be investigated.

4.5.2 MetLink Bus Routes

MetLink bus routes in this region will run generally north-south. The innermost route will run from Doncaster Shoppingtown, via Box Hill District Centre, to Oakleigh District Centre and then on to Chadstone, terminating at Sandringham Railway Station.

Springvale Road will provide the route for a MetLink service from Doncaster Shoppingtown, past Nunawading Civic Centre, Tally Ho Industrial Park, Glen Waverley District Centre and will interchange with the Pakenham line at Springvale and terminate on the Frankston line at Edithvale.

FIGURE 4.3 Eastern Region Projects



Further east a route will be developed from Ringwood District Centre, via Knox City and along Stud Road to Dandenong and on to Frankston. Other services will be provided from Lilydale, via Dorset Road to Upper Ferntree Gully and then on through Rowville to Dandenong. East-west services will be provided along Burwood Highway to Upper Ferntree Gully, from the end of the extended East Burwood LRT route.

4.5.3 Modal Interchanges

A major modal interchange exists at Box Hill and proposals are being developed for Ringwood and Glen Waverley. Improvements will be required to the existing interchanges at Lilydale, Doncaster Shoppingtown, Knox City and Upper Ferntree Gully.

A proposal is being developed for a major new motor station at Hull Road between Mooroolbark and Lilydale Stations. Major car parks could also be developed at Boronia and Heatherdale.

4.6 SOUTHERN REGION (Refer Figure 4.4)

4.6.1 Network Expansion

Major urban development proposed in the Berwick Corridor, from Endeavour Hills to Pakenham, will be served by upgraded services on the Pakenham rail line. Developments currently expected in the Dandenong-Cranbourne-Narre Warren triangle will also be served from the Pakenham line, with bus services to major interchanges at Hallam and Narre Warren stations. Electrification of the line to Cranbourne will be reviewed as Cranbourne develops and patronage levels can be more accurately assessed.

New fringe development on the Mornington Peninsula will be for the most part small additions to the existing urban areas, best served by enhancements to existing bus and coach services. A special study will develop a program of Met improvements for the Mornington Peninsula.

The following projects are proposed:-

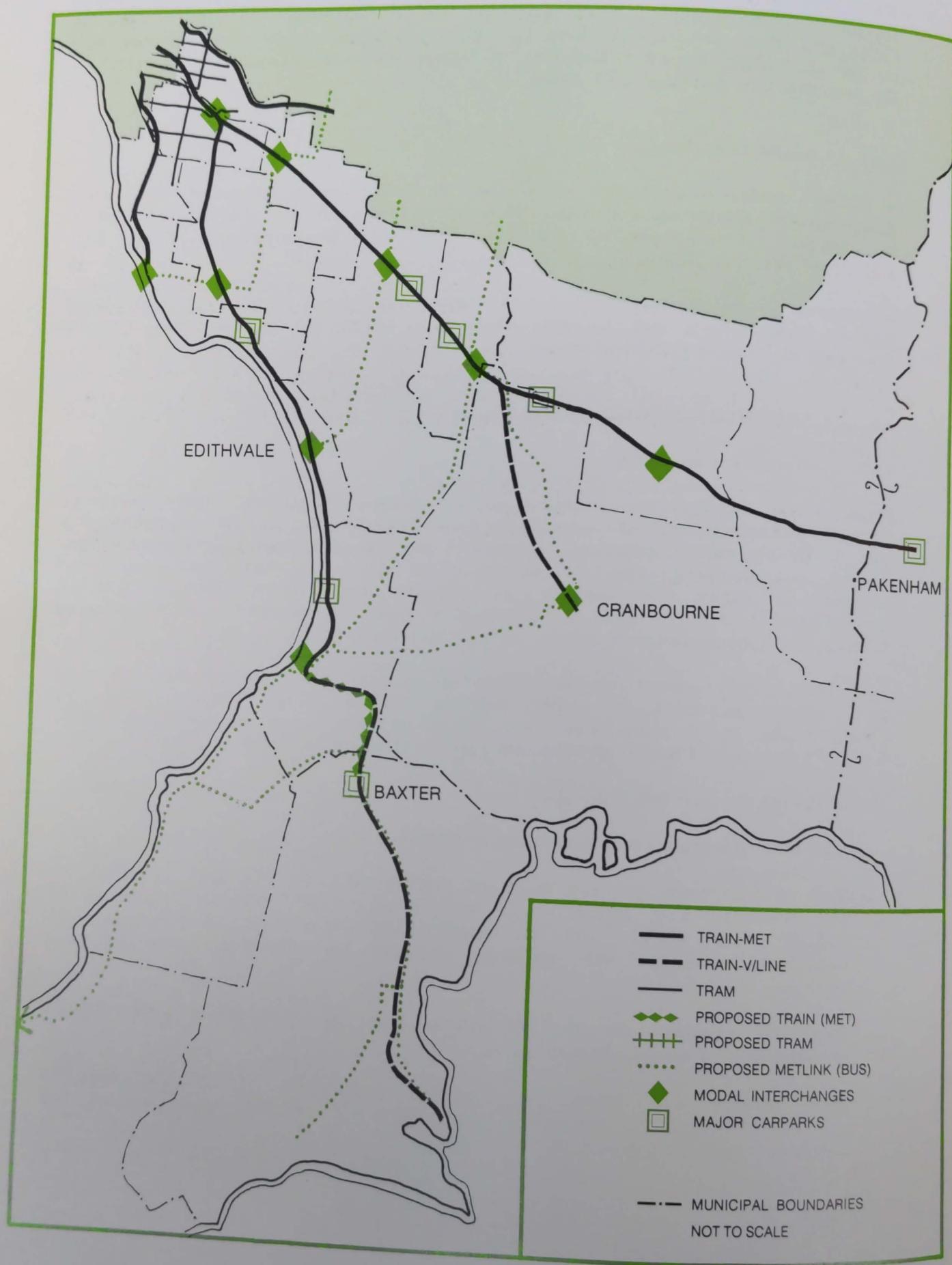
- Rail electrification from Frankston to Baxter:**

This project will provide a more convenient and efficient terminal for the suburban rail service. It will benefit the regional population of 115,000 and attract an estimated 5,000 trips per day. It will considerably relieve the existing pressure on Frankston and adjacent stations.

- Increased capacity on the Pakenham line by resignalling and possible introduction of double decker trains:**

This project will serve the regional population of 287,000 expected within 15 years. Additional capacity will enable more trains and faster services to be provided.

FIGURE 4.4 Southern Region Projects



4.6.2 MetLink Bus Routes

These services would run north-south along the major routes between Oakleigh and Sandringham via Cheltenham/Southland, from Springvale Railway Station to Edithvale and Dandenong to Frankston. A service would also be provided from Frankston via Cranbourne to the new centre in the Berwick-Pakenham Corridor. Services would be provided on the Mornington Peninsula, Frankston to Portsea along Moorooduc Road and from Frankston to Balnarring via Baxter.

4.6.3 Modal Interchanges

Proposals are being developed for major improvements to interchanges at Dandenong and Frankston. Baxter will become a new modal interchange point. Further improvements are required at Oakleigh to facilitate bus operations, and will be carried out at the Cheltenham/Southland District Centre, and new facilities developed at Sandringham, Edithvale and Springvale Railway Stations. As the Berwick-Pakenham Corridor develops, modal interchanges will be required at most of the stations between Dandenong and Pakenham. Proposals are currently being developed for interchanges at Hallam and Narre Warren stations.

Major car parks would be developed at Baxter, to serve the Mornington Peninsula and Hallam to serve development between Dandenong and Cranbourne. Others could be developed at Yarraman to relieve pressure on Dandenong, at Seaford to further relieve pressure on Frankston, at Sandown Park, making use of the racecourse parking, and at Mentone.

5. THE MEANS

5.1 FUNDING CONSTRAINTS

Given the present budgetary climate and the demands by the community to provide a cost effective public transport system it is expected that the availability of funds for public transport in Victoria will not be increased and may be reduced in real terms over the next decade. Consequently MetPlan has been developed within the framework of no real increase in resources being available.

This will require the achievement of more from the resources available through improved management, efficiency of operations and restructuring of work. Extensions and enhancements of the system can go ahead only if other cost-saving innovations and practices are introduced.

Funding the improvements proposed in this Plan must therefore depend upon:

- . the careful application of existing capital funds to new projects as the existing catch up program winds down and major projects such as Jolimont Decentralisation are completed;
- . the extent to which The Met can achieve real revenue increases;
- . the degree to which management and employees can achieve efficiency improvements in providing existing services to finance new initiatives.

5.2 CAPITAL WORKS PROGRAM

Works for system improvements were discussed in Section 3, while in Section 4 system expansion projects were suggested.

While each project will be subject to assessment in the light of public comment and detailed cost/benefit analysis, the extension projects proposed are seen as the most critical to meet planned population growth patterns and associated patronage needs. Implementation of particular projects would be in an order of priority determined by greatest need. Timing of their implementation would be geared to introduction of cost reduction proposals and availability of funds.

Important as these projects are they represent only some 15% of the proposed capital expenditure over the next 15 years. A further 15% will be spent on system wide improvement initiatives. By far the largest amount of money will be dedicated to works required for continuing programmed maintenance and upgrading of the system, expenditure required simply to keep the system operating safely and reliably and to maintain standards of passenger facilities; these activities will not be affected by consideration of the availability of funding for system expansion projects.

The Met currently carries out its construction and maintenance programs using a mixture of in-house resources and outside contractors. To the extent that existing management and work practices can be improved there will be increased scope to undertake projects in-house.

In the civil construction and maintenance program a joint management/union study, using specialist consultants, is already underway to achieve greater cost efficiency. This project, and the Epping stabling and maintenance project, where private sector standards of efficiency are being achieved, show the scope existing for greater in-house efficiency and do work.

The Met operates workshops and depots for its bus, tram and train equipment and rolling stock. The upgrading of skills, facilities and equipment is a major objective aimed at even greater output and service efficiencies. The V/Line Workshops Business Strategy which has scheduled an upgrading and efficiency program to 1990 is an example of such a program.

In accordance with the principle of maximising workshop efficiency, Met Workshops will extend the amount of vehicle construction undertaken, develop scope for joint ventures with the private sector for vehicle building while progressively extending its skill base and facilities.

Buses are currently bought in completed. Some tram components are manufactured and some final fit-out of vehicles is undertaken at Preston Workshops. The majority of parts are imported and assembled in Australia. The Met could undertake component assembly, bodywork construction and final fit-out for its vehicles provided efficient management and work practices were introduced to permit cost-effective competition with the private sector.

5.3 RECURRENT BUDGET

5.3.1 System Expansion Costs

The major improvements proposed in MetPlan would generate real growth in revenues but would also require significant staffing plus funds for fuel, materials and contract payments to private operators.

The new initiatives envisaged in MetPlan could add some \$90 million per annum to recurrent costs. They could require some 1,400 additional Met staff.

5.3.2 Additional Revenue

The target for growth in patronage has been set realistically at 1.25% per annum, or 20% growth over fifteen years. Patronage growth based on current fare levels (in real terms) would then generate additional revenues of \$55 million per annum.

It is clear that if expansion of the metropolitan system is to be achieved, there needs to be a dedicated commitment by management and employees to a program of efficiency improvements in the existing system to avoid increases in recurrent costs. At the same time targeted patronage growth will only be achieved if The Met and its staff are able to offer a safe, reliable, convenient and friendly service to its customers.

5.3.3 Releasing the Resources

A number of areas of Met operations have been identified where greater efficiency could be achieved and resources released without sacrificing quality of service. These efficiencies could be achieved as emerging technologies become commercially proven and investments are made. The major areas outlined below will be investigated to identify more efficient ways of carrying out the required tasks:

- The introduction of new systems in corporate office areas.
- Managerial efficiency, work practices and investment in new equipment in construction and maintenance areas.
- Establishing maintenance performance targets to reduce the number of vehicles out of service.
- Fares and ticketing systems, particularly sales, checking and revenue accounting. Revised ticketing arrangements could release tram conductors and station staff for new roles in expanded fixed rail and bus networks.
- Technological developments in trains and signalling systems have made driver only operation of trains feasible. There is potential to retrain guards for other tasks with wider customer service responsibility including ticket examination.
- Introduction of larger buses and trams could release some operating staff to boost existing services and to provide expanded services.

Decisions about the above matters and subsequent implementation will be made in consultation with employees and the public as appropriate.

With more efficient use of existing resources, up to 2,800 staff could eventually be released for retraining and redeployment. Redeployment of such resources would result in staff levels being reduced, but at least 1,400 of these staff would be required for new functions, and would need to be supported by an intense retraining program to fit them to new roles.

With a targetted 25% increase in seat-kilometres of service delivered over 15 years and a reduction in staffing levels, MetPlan envisages a major increase in staff productivity (service output per employee rising by 35%). There will clearly need to be an associated upgrading in skills. As examples: train and tram drivers will often be operating vehicles alone; tram and bus drivers will often be driving bigger vehicles; maintenance staff may be dealing with new technology equipment.

5.3.4 Cost Recovery

The overall effect of the increased revenue and expenditure resulting from the proposed extensions and enhancements to the system, improved management and work practices would be to reduce further the deficit in real terms.

6. THE WAY AHEAD

6.1 THE MECHANISMS

6.1.1 Action Plans

The fifteen year vision for MetPlan has been described in the preceding section. Implementation requires the identification of discrete activities that can then be assembled into Action Plans for these successive five year phases. These activities can be categorised under four main headings.

Management Structures and Procedures

The administrative arrangements required to ensure that MetPlan initiatives are implemented.

Projects

Construction, or physical works activities that will be funded as part of the Capital Works Program.

Investigations

Studies required to identify appropriate policies, or strategies, or to define specific projects for implementation.

Continuous Programs

Programs already in existence which will need to be upgraded, expanded or otherwise modified to reflect MetPlan initiatives.

Specific activities under each of these headings will be described in Sections 6.3 and 6.4 for each of the five year Action Plans.

6.1.2 Public Consultation

The public consultation programme which formed an important element in the MetPlan process will be maintained in the various projects proposed.

The Regional Advisory Boards will be revised to provide more of a focus for local community input into service design. The revised Boards will also be used to obtain public comment on a regular, on-going basis on development of Met policy.

Area Managers will be responsible for business development as well as service delivery. Emphasis will be placed on improved links between Area Managers and local authorities and community organisations. This change will take place using existing resources not by establishing an additional management level.

6.1.3 Union Amalgamation

It has been noted that, in accordance with the ACTU document "Future Strategies for the Trade Union Movement", unions in The Met have commenced discussions over union amalgamations. It is recognised that the structure mix and coverage of any union is an issue for the union or the union movement to determine. The Met's concern is that unions remain relevant to the development and growth of the public transport industry. A rationalisation in numbers of unions - to reduce the scope for demarcation disputes, to improve work practices, and to enhance the efficiency of negotiations - is one major benefit of amalgamation. Well resourced unions are likely to be more efficient in communicating with members, and more able to facilitate participation on changes. Industry commitment and awareness of industry specific unions is also identified as a major benefit.

6.1.4 Possible Integration of The Met and V/Line

During the last 5 years integration and rationalisation have been key features of improved transport services planning, management and delivery. Substantial benefits have been achieved by transforming the former VicRail, the Melbourne and Metropolitan Tramways Board, the Underground Loop Authority, and the Railways Construction and Property Board into The Met and V/Line. The integration of metropolitan tram, bus and heavy rail services within The Met umbrella has given Melbourne public transport users a better service which is also easier to understand and easier to use.

The Met and V/Line have been able to consolidate the changes of the last five years and as evidenced by MetPlan and STAP, they are both looking to plan for the next 15 years. It is timely and appropriate therefore, to look at the question of further integration and to evaluate the costs and benefits of integrating The Met and V/Line into one rationalised public transport system for all Victorians.

6.2 PHASING

As noted in Section 5, the rate of implementation of MetPlan will be constrained by:

- available capital;
- achievable growth in revenues;
- achievable increases in productivity.

It will also be governed by the availability of resources to properly plan, design and implement the projects.

Revenue growth of \$16 million per annum is achievable at the end of five years resulting from targetted patronage growth at current prices.

Opportunities exist for significant productivity increase during the first five years of MetPlan, primarily through reforms to the ticketing system.

Recognition of these constraints and opportunities, combined with public reaction to the initiatives proposed in the MetPlan Draft Strategy, allows an indicative five year implementation plan to be developed. The initiatives included are listed below. This five year plan will be updated year by year as part of the Budget Cycle. Each initiative will be evaluated in detail prior to implementation and there will be full consultation with all affected groups on sensitive projects.

6.3 ACTION PLAN 1988-1992

6.3.1 Management Structures and Procedures

Activities in this area will focus on improving public consultation procedures, training and recruitment, managerial efficiency including the introduction of performance targets and annual Action Plans. The possible integration of V/Line and The Met will be explored.

6.3.2 Projects (Refer Figure 6.1)

Indicative project proposals for the first five years are listed below. As indicated in Section 5.2, each project will be subject to detailed cost/benefit analysis and particular projects would be implemented in order of priority determined by greatest need. Timing of implementation would be geared to cost reduction proposals and availability of funds in particular budget cycles.

Train System :

- . completion of Jolimont Decentralisation;
- . extension of the electrified train system from St. Albans to Sydenham/Calder Park;
- . extension of the electrified train system from Broadmeadows to Coolaroo;
- . extension of electrified train system from Frankston to Baxter and construction of modal interchange;
- . extension of electrified rail system from Epping to South Morang with major modal interchange facilities at the new terminus;
- . investment to increase the capacity of the Ringwood line;
- . implementation of the Rail Operations Staff Project;

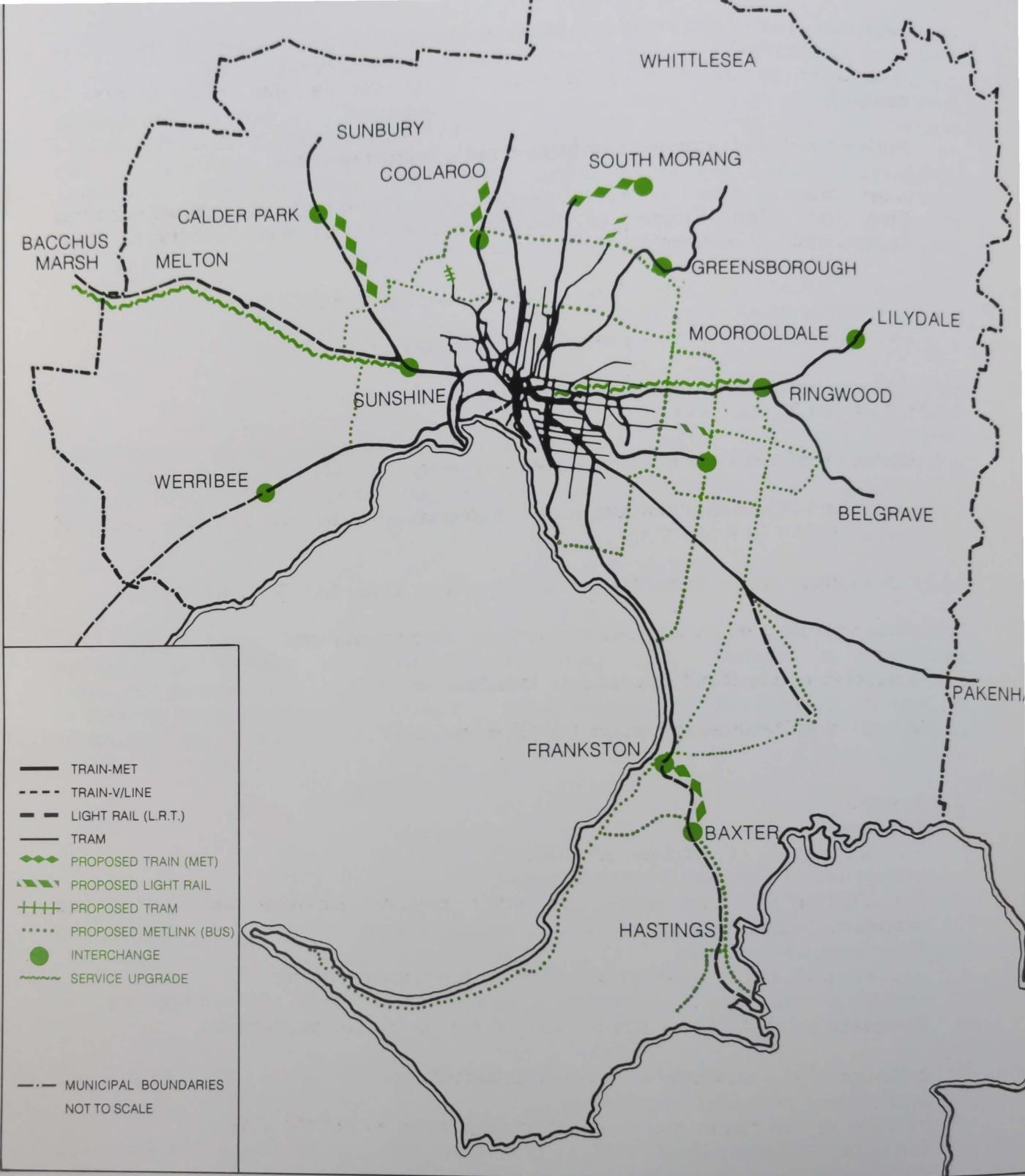


Figure 6.1 Action Plan 1988-1992

construction of the Moorooldale Motor Station;
investment to allow more services to Werribee in line with growth in demand;
equipping of all trains with train-base radio communications;
construction of modal interchange facilities at Broadmeadows, Frankston, Glen Waverley, Greensborough, Ringwood and Sunshine District Centres and at Werribee;
completion of the Flinders Street redevelopment project;
upgrading of services to Bacchus Marsh and Melton.

Light Rail and Tram Systems :

- extension of the tram network to Airport West;
- extension of East Burwood tram to Vermont South as the first stage of the LRT link to Knox City;
- development and construction of new low-floor Light Rail Vehicles;
- commencement of an upgrade program for all tram depots;
- extension of the Bundoora tram to Mill Park as LRT;
- complete AVM implementation for all trams.

Bus System :

- introduction of all MetLink services;
- introduction of bus lanes and other priority measures on Eastern and Westgate Freeway routes;
- expansion of the network to serve newly developing suburbs;
- introduction of AVM (or similar system) for contracted bus services;
- redesign of bus services in all neighbourhoods;
- revision of bus routes and terminal arrangements within the CAD.

Multi-Modal Initiatives :

- Fare System simplification;
- introduce a new ticketing system including a network of sales outlets;
- resolve the issue of access for people with disabilities and commence implementation;

utilise the AVM and Metrol systems to maximise information flow to passengers and develop long term plans for a passenger information system;

development of a country and interstate bus terminal at Spencer Street Station.

6.3.3 Investigations

- completion of plans for the gradual lifting of train speeds on all lines;
- prepare Fairway Stage II program for major intersection improvements;
- explore opportunities for upgrading the Bundoora and East Burwood tramways to LRT.

A series of studies are already underway that will ensure a rapid progression of initiatives. These major studies and their completion dates are as follows :

· Central Area Transport Strategy	October 88;
· Transport for People with Disabilities	October 88;
· Western Region Public Transport Study (WestTrip)	December 88;
· Mornington Peninsula Public Transport Study	December 88;
· Upfield Corridor Study	December 88;
· Proof-of-Payment Ticketing Study	December 88;
· Women's Transport Needs Study	February 89;
· Plenty Corridor Study	February 89;
· Ringwood Line Study	March 89.

These will be followed in 1989 by the :

- Doncaster Corridor Study;
- Berwick-Pakenham Corridor Study.

6.3.4 Continuous Programs

- achievement of service standards specified in this report, particularly for bus services in the evening and at weekends;
- purchase of additional trains and deployment to accommodate growth in demand without exceeding loading standards;

a doubling of expenditure on new car and bike parking at railway stations;

maintenance of all stations and infrastructure in an efficient and effective condition through regular renewal;

renewal and upgrading of all assets including pantograph conversion and renewal of the electrical supply system;

purchase buses as required for system expansion;

purchase of articulated buses for Met operated services.

6.4 ACTION PLAN 1993-2002

The on-going management, planning and basic works programs described above will continue through this period, as will expansion of the bus network to serve newly developing suburbs, subject to the same conditions described in paragraph 6.3.2.

The major new projects expected to be implemented during the second and third phases of MetPlan are described below:

- extension of the electrified train system from Calder Park to Sunbury;
- extension of the electrified train system from South Morang to Mernda;
- extension of the electrified train system from Coolaroo to Craigieburn;
- investment to increase the capacity of the Pakenham line;
- major works to allow higher speed train operation on the train network;
- extension of the electrified train system from Sunshine to Melton should studies demonstrate its merit;
- extension of the electrified train system from Werribee to South Geelong should studies demonstrate its merit;
- extension of Bundoora tramway to South Morang as LRT;
- extension of the LRT network to Doncaster;
- extension of the Maribyrnong tramway to Avondale Heights;
- completion of the Fairway Stage II Program for major intersection improvements;
- construction of modal interchange facilities at other District and Sub-Regional Centres;
- completion of new passenger information systems.

THE UNIVERSITY OF MELBOURNE LIBRARY



31290009000282


The Met.
AN AUTHORITY OF VICTORIA TRANSPORT

