



From the Office of the
Minister of Transport

TRANSREPORT

PRODUCED BY MELBOURNE'S METROPOLITAN TRANSPORTATION COMMITTEE

JUNE 1968

SURVEY REPORT READY THIS YEAR

Melbourne's transport survey—described as a "Blue-print for the Future"—should be presented to the Victorian Government this year.

The second and final stage of the survey is nearing completion.

The report to the Government will recommend a public transport system and freeway network to serve the estimated 3,750,000 population of Melbourne in 1985.

Field surveys, on which the plan is based, started in 1964 and were completed the following year. Then began the gigantic task of checking the data and projecting the findings to the design year of 1985.

By using the latest overseas transportation study techniques and two high-speed computers to sift and analyse the data, engineers have been able to develop and test a series of feasible plans for the future.

By analysing the effects that employment, siting of industry and residential development have had on present travel habits, the Metropolitan Transportation Committee has been able to accurately estimate future travel trends and methods of transport required to move the 1985 population.

The road and public transport proposals in the Metropolitan Planning Scheme prepared by the Melbourne and Metropolitan Board of Works, were re-examined by the Committee.

Subsequently, five alternative road and public transport networks have been designed and tested; a sixth, and probably final, plan is now being prepared.

CHAIRMAN'S MESSAGE



THE Metropolitan Transportation Committee was constituted to advise the Government on the planning and development of transport facilities and services within a 30-mile area of Melbourne's G.P.O.

The Committee has undertaken, as you will realise, a very big task which requires a considerable amount of time, money, effort and thought.

I expect that the work of the Committee will give real guidance to the Government, but it will be for the Government to decide how and when the Committee's recommendations are carried out.

In a democracy, just how much of any planning work can be carried out depends upon many considerations, all of which finally revolve around the wishes of the people.

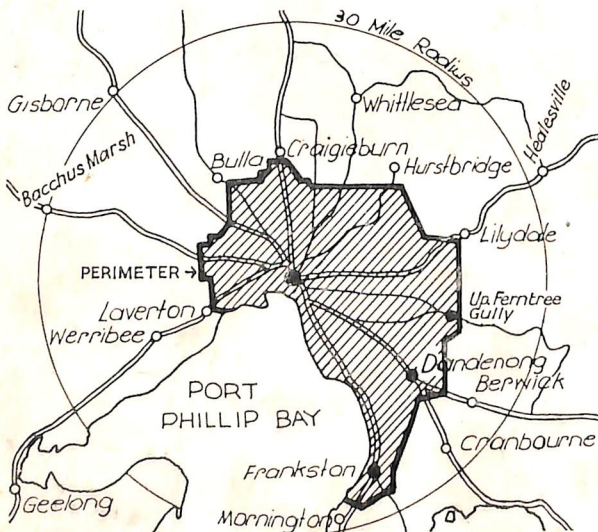
Our community will have to make some hard decisions on whether it will afford the transport system which it needs and, indeed, demands.

I invite you to consider what will happen if Government planning for a balanced transport system cannot be put into action, because of lack of practical community support.

We have in Melbourne a vital city, the capital of a State which has an outstanding record. This record will stand for little, however, if we allow the very means by which our city operates—transport—to languish because attitudes of "let someone else contribute" and "why don't they do something about this".

All told, there is a big task for all citizens and all Governments.

The Honourable
V. F. WILCOX, M.P.
Minister of Transport.



Shaded section of the map shows the Transportation Study area within the 90-mile perimeter that covers 583 square miles. The 30-mile radius line represents the limit of the Metropolitan Transportation Committee's interest.

MEN BEHIND THE STUDY

THE work of the Metropolitan Transportation Committee is a major attempt to tackle Melbourne's transport problems as a whole, rather than piecemeal as in the past.

The Committee was formed by a Victorian Act of Parliament, in 1964, to advise the Government on planning, development, co-ordination, control and improvement of

transport facilities in and around the metropolitan area.

Chairman of the Committee is the Hon. Vernon Wilcox, M.P., Minister of Transport.

Committee members

Members are: Messrs. R. J. Hamer (Minister for Local Government), G. F. Brown (Chairman, Victorian Railways Commissioners), R. J. H. Risson (Chairman, Melbourne and Metropolitan Tramways Board), E. V. N. Field (Chairman, Transport Regulation Board), A. H. Croxford (Chairman, Mel-

bourne and Metropolitan Board of Works), J. A. Hepburn (Chief Planner, Melbourne and Metropolitan Board of Works), I. J. O'Donnell (Chairman, Country Roads Board), J. D. Thorpe (Chairman, Traffic Commission), E. W. Coates (Director of Finance), A. G. Brown (Co-ordinator of Transport), Cr. R. A. Talbot (Lord Mayor, City of Melbourne) and Cr. I. F. Beaupaire (City of Melbourne).

From America

The first phase of the study was an extensive survey carried out by an American firm of consultants, Wilbur Smith and Associates and Melbourne engineering consultants, Len T. Frazer and Associates. Both firms acted under the guidance of Study Co-ordinator Sir Louis Loder, C.B.E., and the Hon. E. R. Meagher, M.P., who was until 1967, Minister of Transport and chairman of the Committee.

Melbourne engineers received their training from the consultants. Since the survey was completed a Technical Committee and a study group comprising engineers from the various authorities, have continued work on preparation of the 1985 plan.

Parking in Central Melbourne

EXTENSIVE field surveys have disclosed for the first time how the drivers of cars, trucks, and taxis park their vehicles in the centre of Melbourne.

From the surveys has come a complete factual picture of present parking characteristics, and demands and needs for the future.

The surveys covered two distinct areas. These were the central business district of 144 blocks in an area of 2.1 square miles, and the adjoining fringe of an additional 3.9 square miles.

More than 116,000 interviews were obtained in the central business district, and 2,500 in the fringe. Also a special detailed survey was made of the Queen Victoria Market area.

Some of the findings were:

- 123,700 parkers used 30,900 central business district spaces between 10 a.m. and 6 p.m. on a typical week-day;

- kerbside parking provided 43 per cent. of total spaces available;
- public off-street facilities provided 9,300, or 30 per cent., of the central area spaces while private off-street facilities contained another 8,400 spaces;
- maximum accumulation of parked vehicles was 24,000 at 1 p.m.;
- shoppers, who comprised 17.5 per cent. of all parkers, stayed an average of 67 minutes;
- business parkers represented 42.6 per cent. and stayed an average of 53 minutes;
- shoppers walked an average of 637 feet from their parked car to their primary destination; business parkers walked 431 feet;
- sixty-two business establishments, institutions and office buildings each attracted more than 200 daily parkers.

The surveys have indicated that there will be a shortage of 12,500 spaces in the 144-block central business district within the next 10 years.

PHOTOGRAPHS BY VICTORIAN RAILWAYS



Just before 5 p.m. any week-night and already the Punt Road traffic has started to slow to a crawl.

FUTURE MELBOURNE

AN analysis of 1 1/4 million data cards processed from the 1964 transport survey has predicted some of Melbourne's characteristics in 1985.

Indications are that:

- Melbourne will have a population of 3,750,000;
- there will be a work force of 1,600,000 of which 600,000 will be in the six inner municipalities of Richmond, Sth. Melbourne, Port Melbourne, Fitzroy, Collingwood and Melbourne city itself;

- population will have increased by 50,000 within the same six inner municipalities (at present they are declining);
- car registrations will almost treble;
- children at school will be 940,000—about 25 per cent. of the anticipated population—and more than double the 1964 figure;

- Melbourne city area trips will increase by 37 per cent. up to 740,000 a working day. In addition, personal income is expected to rise at an average of 1 1/2 per cent. per annum up to 1985.

MATHEMATICAL FORMULAS

MATHEMATICAL equations and formulas have been used to assess how and where Melbourne people actually travel on a daily basis.

The repetitive travel nature of Melbourne people made the analysis possible.

Equations link together the type of land use, such as for housing or retail and commercial centres, the transportation system and the social characteristics of the population.

The equations developed from the initial survey data have been used to predict travel by all types of transport, and are based on estimated future land development and an assumed transportation system.

Projected travel is calculated and mechanically allotted to a transport plan, and refinements made until a satisfactory result is obtained.

The equations tell the engineers the number of trips

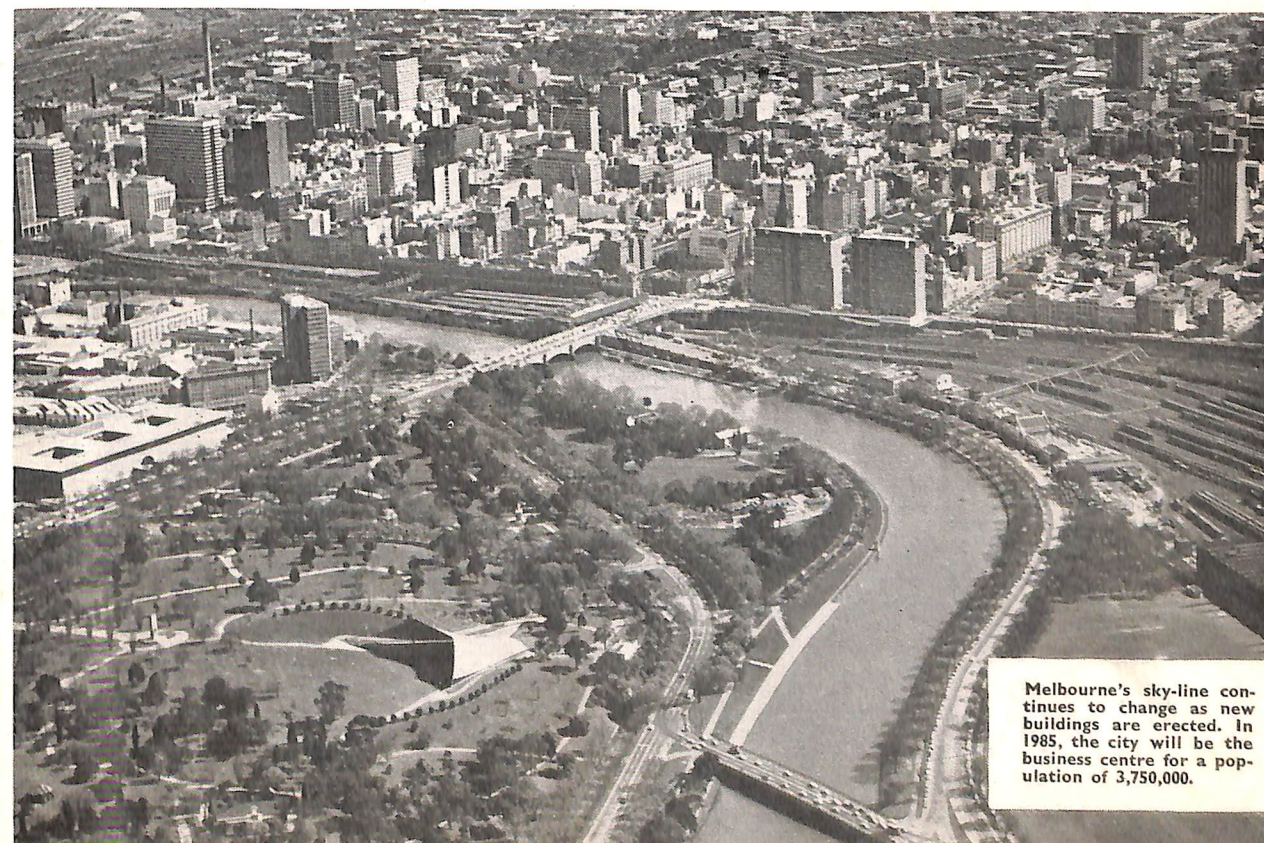
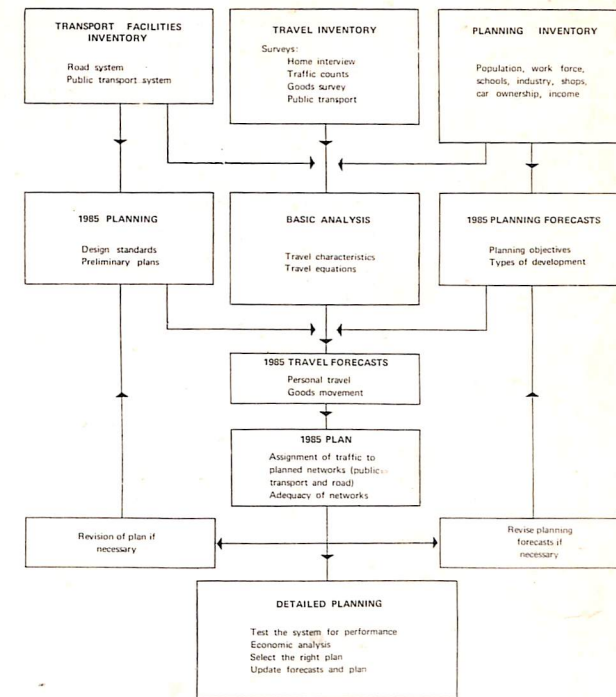
generated; their distribution through the system allows the engineers to assign the trips to the plan.

One of the many equations is $0.52x + 0.52y + 67.7$, when x is composed of figures involving the work parking fee, distance travelled and public transport fares involved, and when y is composed of the car and public transport peak travel times.

This provides the engineers with the percentage of persons using public transport for a household owning one car and in a particular area of Melbourne.

Literally dozens of such formulas have been developed and used by the Committee to predict all types of travel.

TRANSPORTATION PLANNING PROCESS



Melbourne's sky-line continues to change as new buildings are erected. In 1985, the city will be the business centre for a population of 3,750,000.

MELBOURNE DOCUMENTED

A city filmed

KEEPING the public informed of its activities is just one of the responsibilities of the Metropolitan Transportation Committee.

Latest aid is a 22-minute colour film, *Melbourne 1985*.

The film deals with the present traffic problem and outlines the methods used in the extensive survey now completed.

Using animation, the film dramatically explains how Melbourne will continue to expand.

Balanced system

A balanced transport system, both public and for private motorists, was necessary, and action would have to be taken promptly, otherwise Melbourne traffic would literally come to a stand-still.

The film concludes with several artists' impressions of Melbourne in 1985.

Crawford Productions Pty. Ltd., of Melbourne, made the film. Copies are available in 16 m.m. on loan from the State Film Centre, 110 Victoria Street, Carlton, 3053.

AS a result of the 1964 transport study, the Committee knows more about metropolitan Melbourne than has ever been known before.

Success of the survey is attributed to the ready co-operation received from the 285,000 people interviewed. They included train, tram and bus passengers, motorists and women at home.

Questions asked in the survey had been developed for Melbourne conditions following a large number of similar urban studies in different parts of the world.

Many interesting facts were disclosed by the survey.

The 1964 population in the survey area was 2,012,000, with the majority living in 587,000 dwellings, at densities ranging from 50 persons per acre in the inner suburbs to less than 10 persons per acre in the outer districts. About two-thirds actually resided in the eastern and south-eastern suburbs.

There were 840,000 jobs in the survey area. Over one-third were in manufacturing industry and nearly half in tertiary industry, such as professional and finance.

Only 18 per cent. of the metropolitan work-force were employed in the Melbourne city area (known as the central business district); 80 per cent. of the employees lived within 10 miles of the city, and 50 per cent. within five miles.

Nearly half a million cars were registered in the survey area; 63 per cent. of households had the use of a car, and 14 per cent. had two cars.

A definite residential pattern was established for "white collar" and "blue collar" workers. "White collar" workers predominated in a well established belt in the eastern and south-eastern suburbs; "blue collar" workers predominated in the northern and western suburbs.

Income tended to follow a similar pattern. Six per cent. had \$1,000 per annum or less, and six per cent. had \$7,000 per annum or more; 50 per cent. had more than \$3,000 per annum.

Sixty-eight per cent. of the week-day workers travelling to the Melbourne inner city area used public transport; 31 per cent. used cars. Comparative 1951 figures were 85 per cent. and 12 per cent. respectively.

Trains carried 412,000 passengers daily, Monday to Friday; two-thirds of the passengers entered or left the city area through Spencer Street, Flinders Street or Princes Bridge stations. Trains between Flinders Street and Richmond carried 161,000

passengers daily on Mondays to Fridays.

Trams were used by 552,000 passengers each week-day; 50 per cent. of the passengers travelled to and from the city area.

Average bus trip was 5½ miles, compared with 6¾ miles for trams and 14 miles for trains.

Passengers using buses daily, Monday to Friday, totalled 408,000; 11 per cent. of the passengers travelled to and from the city area.

REPETITIVE TRAVEL

THE way John Citizen regularly catches the same train, tram or bus to work and his wife drives to the local kindergarten or shopping centre are examples of repetitive travel.

This was particularly noticeable during the study of the travel habits of people interviewed in the transportation study's survey.

To find out just how repetitive travel can be, over 1¼ million data cards were analysed from on-the-spot interviews.

Thirty-thousand home interviews were conducted representing five per cent. of Melbourne's households.

Truck driver interviews totalled 9,100—a 10 per cent. sample; 589 taxi drivers, or 25 per cent. of the fleet, were quizzed.

Roadside interviews of motorists reached 44,000, while another 200,000 public transport interviews were held, representing 14.5 per cent. of the commuters.

These surveys provided a wealth of material that was used not only to find solutions of transportation problems, but also for the better understanding of the complex relationship between people, transport and land use development.



Melbourne's busiest intersection is the corner of Swanston and Flinders Streets. Trams, buses and cars all carry their share of passengers, while Flinders Street railway station is one of the busiest in the world.