

Despite the spirit of 'unification' embodied in the construction of first the Union - and then the Republic of South Africa, parochialism is a historic way of life. It can also be seen throughout the railway system and in all facets of public transport.

That this unfortunate aspect of humanity can be overcome, there is no doubt. We have only to consider the very successful work of the Rand Water Board, the Johannesburg Sewerage System and Cape Metropolitan (Land use) Planning Committee to see that, where persons can be convinced of the public good or, more cynically, of the self advantage to be gained from a broader view, parochial interests are overcome. The spirit of the Urban Transport Act was aimed at achieving this co-operation in transportation. This was also the spirit behind the much maligned and non-respected 'Physical Planning Act' which calls for guide plans to be prepared for economic areas.

The great difference between these two co-ordinating Acts is that the Urban Transport Act has a designated source of finance to support it, the Guide Plans do not.

The greatest failing amongst all parties involved in effecting the Urban Transport Act has been in not implementing the White Paper's call for a trial subsidy from the Exchequer, to enable an experimental area to demonstrate the effectiveness of the permit and levy system to raise moneys for its Consolidated Metropolitan Transport Fund.

This failure is attributable to all parties involved. Firstly to local governments who lack the political courage necessary for such an exercise. Johannesburg and Pretoria spent a year arguing over which city would try, and then dropped the issue, preferring to demand that central government should be a source of unlimited financial largesse.

Secondly to provincial governments who ineffectually argue that all vehicle taxes are their prerogative. But who then also lack the political courage to approve the raising of such taxes when approached by their officials.

Lastly to central government for failing to provide the bridging finance necessary to encourage lower tiers of government to bring about the envisaged permit and levy system, and for failing to remind and educate lower government that this is the envisaged financial policy.

Central governments' failing has then been aggravated in its making available just sufficient moneys to keep all parties on the hook as it were, (no Council can reject a contribution, no matter how small) but failing to point out its true motives in this regard.

The lower tiers can then stand accused of not recognising the Central Government's stand for what it is and going boldly ahead accordingly, independently raising funds through the various ways at their disposal in the Urban Transport Act.

We thus find ourselves, five years on from the promulgation of the Urban Transport Act, in a continuous dog-bites-dog political circle which, if not broken out of, could spell the demise of the whole urban transport initiative.

This is particularly unfortunate as, from the planning and representation point of view, the concept of metropolitan planning has proved itself both effective and practical in getting councils to see beyond their municipal boundaries.

The responsibility as well as the practical power to break this deadlock lies with Central Government. How this can be achieved will be discussed in Chapter 5.

The procedures established in terms of law from the Driessen Report and the White Paper are sound. The practical problem lies in getting all parties involved out of the political impasse created by misinterpretation of these procedures, by different parties for their own political ends. The fault is not attributable to one party, but runs throughout the system.

CHAPTER 4: AREAS OF MEASURABLE EFFECT

Other aspects of Central Government involvement can be quantified. These are discussed in this chapter.

4.1 Use of urban transport facilities

Both the Driessen Report and the White Paper identified measures which could be implemented in the short term and in the medium term to reduce the demand for travel and the demand for transport facilities. These have been identified in previous sections and so shall not be repeated here.

Unfortunately the level of finance envisaged for the implementation of these measures has not been achieved in practice.

This applies equally to the contribution which was promised from the Urban Transport Fund, as well as the contribution which it was envisaged would be raised locally for the respective Consolidated Metropolitan Transport Funds through the various means made available to the Provinces, Core Cities and Local Authorities.

Consequently it is not possible to monitor the actual direct effects of the Urban Transport Act. Nevertheless it can be argued that the Driessen Report provided a focus for all parties interested in the provision and usage of urban transport facilities and, consequently, can further be argued that the Central Government has thus had a degree of influence on how urban transportation is viewed in the Republic. Media coverage on the Central Government initiative also helped to convey the message of the urban transport problem and its need for solution to the man in the street.

It is accepted that points mentioned above can not be viewed as direct controls. There has been a general reduction in demand for urban travel over the past five years and a general, albeit marginal, increase in the use of public transport. These facts are known and are attributable to many factors, for example :

- generally slower economic activity, except in 1980;
- fuel restrictions;
- higher residential densities nearer places of work;
- public awareness of the urban transport problem and patriotic or practical attempts to solve it;
- a reduction in the real spending power of the whites, who over previous history have been the ones creating the demand for road space;
- publicity through, for example, the Driessen Report / Urban Transport Act;
- higher cost of parking.

All of these could have been addressed within local government without any influence from Central Government.

But it must be accepted that only the Department of Transport's 'Requirements' for the preparation of an Urban Transport Plan provides the framework within which these influences can be objectively measured. No single authority has a similar overall monitoring system.

Consequently the author feels at liberty to say that this initiation of a uniform system can be viewed as Central Government's responsibility entirely and may be regarded as an effect of central government participation.

4.1 Aims of the Department of Transport's Monitoring Requirements.

The aims of the DOT's monitoring requirements are four fold:

- to measure the usage of transport facilities;
- to measure the effectiveness of measures taken,
- to measure the movement of traffic against the four Driessen goals of:
 - Mobility
 - Convenience
 - Minimum Cost
 - Minimum Side Effects.

Incidentally these four goals have been accepted universally throughout the country by transportation planners;

- to provide decision makers with objective criteria against which to determine future policies.

There was initial reluctance from the Core Cities to comply with these requirement. While such reluctance is perhaps understood, the author suggests that it was primarily due to resistance to change, normally expressed as 'What will the information be used for'?

Happily the usefulness of the data is now generally accepted by most, and for the use of all levels of government. A long way has been covered - a equally long way remains ahead before the ideal is reached of having annually updated, comprehensive data interchangeable throughout the country's authorities' computers.

The present situation is as follows:

- | | |
|-----------|---|
| JOMET | - all information has been gathered once;
with the exception of person kilometres
of travel in Sandton; |
| PREMET | - all information has been gathered once; |
| DURBAN | - all information has been gathered once; and surveys
are underway a second time around; |
| CAPE TOWN | - not all information has been collected yet; |
| PEMET | - the ideal exists, probably due both to the smaller
size of the area and to the dedication of staff,
and special thanks are due to Mr. G.V. Dazeley (Traffic Engin.
in this regard, in that all data is updated annually; |
| ORMET | - has the promise of good things to come with, in
the newest declared metropolitan transport area, all
data having been gathered once. |

The aim of this dissertation, and especially of this section, is one of comparison of 'before and after'.

As sufficiently comprehensive data does not yet exist for such a comparison in any area other than PEMET, initial emphasis in this and following sections will be on that area and on the data obtained from Port Elizabeth as Core City.

Comparisons will be made between and within other areas, especially JOMET as the premier area in the country. It is suggested that the PEMET and JOMET areas may be considered as representative of the South African urban areas as any others.

A swing is however evident towards the Province making contributions. This is to be welcomed. Practical financial constraints have thus far not permitted a contribution to be made.

The JOMET data is collected, as is the case in all declared metropolitan transport areas, with the same aims in mind as those described in the PEMET 1980 annual statistics, given in section 4.1.3 of this report.

The only noteworthy difference in PEMET from other areas is a higher white ownership of private motorvehicles than the norm, attributed by the Driessen Committee in 1973 to the area being the home of the South African motorcar industry. This position has now been lost to Rosslyn / Brits but this is not considered material, as the facts which need to be looked at are predominantly of Black travel, and in this area PEMET is certainly as representative as anywhere.

4.1.3 Comparison of 1970 vs 1980 travel in PEMET

We must remember that the Driessen Report was published in 1973, the White Paper in 1975 and the Urban Transport Act in 1977. The PEMET area was declared in January 1979 and first received implementation subsidy in the 1970/1980 government financial year (1 April 1979 - 31 March 1980). As is the case of all urban areas in the Cape Province the PEMET area benefits from generous Provincial subsidies, at present confined to improvements to the road system. While this is marked contrast to cities in other provinces, the effect has been constant over the ten year period in question so it can not be considered to influence traffic behaviour excepting perhaps in the longer term than it is possible to consider in this dissertation.

For the reader's interest the amount made available by the Cape Province to the area is equivalent to the licence fees collected in the area. This approach is laudable and could well serve as an example to other provincial authorities. The Driessen Committee did not pay particular note to this enlightened approach, but did record that all four Provinces should operate one and the same financial system, which could be read as implied support for the Cape, as the theme running through the Driessen Report is one that the user should pay for the facilities he enjoys. This recommendation of the Driessen Report was, significantly, not followed through by either the White Paper or the Act. It is however, interesting to note that the Natal Provincial Administration is now making R 1,0 million annually available to the Durban CMTF, while the Transvaal Province has approved an amount of R 3,0 million annually, for JOMET, PREMET and ORMET combined, but has not been able to find this money in its budget at this time.

A swing is certainly evident towards permitting the licence fees accrued in an area to be spent in the area, which is to be welcomed and which ties in with the financing philosophy expressed in Driessen.

In order to give the reader added perspective, the introductory section to PEMET's 1980 annual statistics¹⁸ is quoted below:-

The statistics presented in this report are part of an on-going commitment to accumulate data which will enable transportation planners to obtain a measure of the changes taking place in travel patterns within the Port Elizabeth Metropolitan Transport Area. In essence, the report describes the various components of the transport infrastructure together with statistics on land use, population and employment. This is followed by a summary of the trip making characteristics for the area, together with estimates of person kilometres of travel by various modes. Considerable importance is placed on the collection of this data, since without a thorough understanding of the current situation, it is impossible to do any meaningful planning for the future.

The report closely follows the content and format laid down by the Department of Transport but has been expanded or contracted where necessary to suit local conditions. The interested reader is referred to 'Report Number MPT :/81 : September 1981' produced by the City Engineer, Port Elizabeth, as part of the Port Elizabeth Metropolitan Transport Study for fuller details.'

Similar reports exist for all other declared metropolitan transport areas as part of their annual transport plans and are thus available for public reading in the offices of:-

Department of Transport, Pretoria;
Respective Provincial Department responsible for urban transport;
Respective Core City Engineer.

The total population of the Metropolitan Transport Area as recorded by the 1970 census was 499 000 persons, divided between the various race groups as follows: 155 000 White, 118 000 Coloured, 5 500 Asian and 220 500 Black persons. An estimate of the 1978 population is 654 500 made up to 187 400 White, 165 900 Coloured, 7 600 Asian and 293 600 Black persons.

Despatch and Uitenhage White communities, located 25 to 30 km respectively from the coast along the Port Elizabeth - Uitenhage main road, accommodate approximately 20% of the White Population of the Metropolitan Transport Area. In the immediate vicinity of these two communities approximately 16% of the Metropolitan Coloured and Asian population and 17% of the Black population are housed.

The 1980 census results are not yet readily available apart from 5% samples of some areas.

The Port Elizabeth Metropolitan Transport Area includes the following local authorities:-

- Port Elizabeth Municipality (Core City)
- Uitenhage Municipality
- Despatch Municipality
- Divisional Council of Dias
- Divisional Council of Winterhoek

It also includes those residential areas adjacent to Port Elizabeth, Uitenhage and Despatch, which fall under the jurisdiction of the East Cape Administration Board.

The Metropolitan Transport Area covers approximately 87 000 ha, of which 45 000 are within the Municipality of Port Elizabeth, 11 000 within Uitenhage Municipality, 2 000 within Despatch Municipality, 16 000 within the Dias Divisional Council and 13 000 within Winterhoek Divisional Council.

There are five major identifiable business districts within the metropolitan area, of which the Central Business District of Port Elizabeth is the largest. These have recently been supplemented by the opening of three hypermarkets, two of which are situated on the old Fairview race course and the other in the western suburbs at Hunters Retreat.

The means of controlling density in these business districts is through having a maximum Floor Space Index (F S I). This is defined as the ratio between the gross floor area of the building, together with any necessary outbuilding, and the area of land upon which it is constructed. In a number of Town Planning Schemes, the FSI is referred to as a Bulk Factor, but the definition is identical.

It was suggested in the White Paper that bulk factors be frozen with the passing of the Urban Transport Act. This was, for obvious reasons of non-interference, not proceeded with. However, the Urban Transport Act attempts to influence bulk factors through consultation between the NTC and Administrator in areas specified in the relevant urban transport plans. This consultation is

deemed necessary as a bulk factor is the single most important factor influencing traffic attraction/generation from a particular property. Interested readers are referred to the Department of Transport's publication: 'TPC 4/80: The Effects of a Change in Land use on Traffic Volumes.

It has taken sometime to obtain agreement between all parties on the practical implementation of such 'consultation'. A uniform approach has now been agreed upon and is described in an NTC resolution on " Procedures for approval of the change in bulk factors in a declared metropolitan transport area."

The first basic measure of transport demand in any infrastructure is the number of vehicles in the area producing the demand. This is particularly true in Port Elizabeth as there is little through of foreign traffic as is the case in Johannesburg, Durban or other similar areas.

A comparison, such as that given in Table 4.1, is thus of interest.

TABLE 4.1 : VEHICLE REGISTRATION : PORT ELIZABETH METROPOLITAN TRANSPORT AREA

CLASSIFICATION	Driessen Projections			Actual or Projected			Driessen 1970/1980 growth p a	Port Elizabeth 1970/1980 average growth p a	Port Elizabeth 1979/1980 growth
	Port Elizabeth 1970	Port Elizabeth 1980	Port Elizabeth 2000	Port Elizabeth 1970	Port Elizabeth 1980	Port Elizabeth 2000			
Motor Car	66 000	112 000	272 000	66 000	86 543	164 400	5,4%	4,5%	0,8%
Mini Bus	in above	in above	in above	in above	1 906	3 600	-	4,5%	3,2%
Motor Cycle	in above	in above	in above	in above	7 398	14 000	-	4,5%	35,5%
Commercial Vehicle	9 000	19 000	67 000	9 000	19 354	68 800	7,8%	12,0%	1,5%
Bus	in above	in above	in above	in above	526	630	-	1,0%	1,2%
Other	not con- sidered	not con- sidered	not con- sidered	not con- sidered	10 305	12 400	-	-	3,5%
TOTAL	75 000	131 000	339 000	75 000	126 032	260 830	5,7%	5,3%	2,7%

The Driessen projections for ten years appear to be accurate in total vehicle population but have underestimated the increase in growth in goods vehicle and bus numbers (by 30% in total) and overestimated the growth in private motor cars (by 5% in total). The naturally did not project or the enormous growth in motor-cycle ownership as it was not envisaged at that time that the 'energy crisis' would have this effect. The apparent tremendous growth in goods vehicles could be attributable to the increase in 'bakkie' ownership. This is not readily identifiable.

The details of the PEMET figures for 1980 compared with 1979 reveal that:-

There has been a tremendous increase in motor cycle ownership during the past year. In 1979 motor cycles represented 5,1% of all privately owned vehicles, whereas the corresponding figure for 1980 was 6,9%.

The growth of privately owned vehicles in Uitenhage is generally significantly higher than that in Port Elizabeth. There has been a significant decrease in vehicle ownership by Blacks in Port Elizabeth, whereas the figures for Uitenhage reflect a substantial increase.

There was an overall decrease of 2,4% in cars owned by Blacks in the area. The reason for this is not known, but it goes against every prediction in the country.

During 1980 the average daily vehicle travel on all major routes amounted to 2 014 00 vehicle kilometres per day. This represents an increase of 3,6% relative to the 1 943 000 vehicle kilometres per day during 1979. The above figures indicate that the trend in vehicle travel, which was declining during 1977, 1978 and 1979 has now been reversed and is again increasing. However, the figures for person kilometres of travel for 1980 show a decline of 0,6% relative to 1979.

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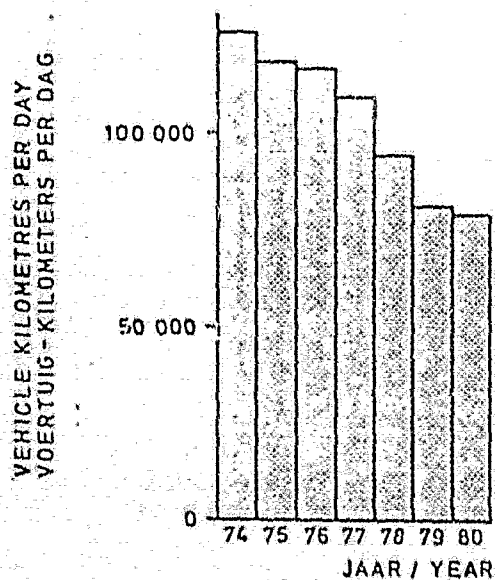
Nine cordons have been established and at eight of these comprehensive vehicle occupancy counts have been conducted in addition to the 24 hours traffic counts. The V O counts consist of roadside survey whereby the number of occupants per vehicle is classified and recorded by driver race group and time of day.

The distinction between peak and off-peak periods is most important since significantly higher vehicle occupancies have been recorded during peak periods. These are statistics well worthy of monitoring in their own right as they will provide a ready means of estimating the success or failure of various transport policies, promotion of lift clubs or staggered working hours, etc. The information may be analysed on a route by route basis, or by considering total persons crossing a cordon. Since 1979 was the first year for which comprehensive surveys were undertaken, it is not possible to conduct much analysis. However, it is hoped that these surveys will yield some valuable results in the future, especially when co-ordinated with the results of the bus surveys which are being undertaken in the area.

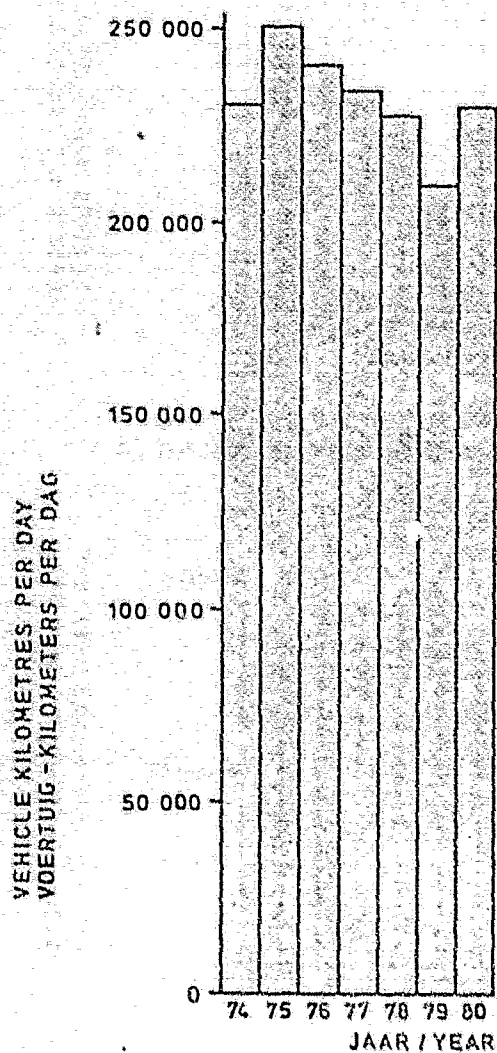
Using the results of the vehicle occupancy cordon surveys and relating every traffic count station within the metropolitan area to one of the cordon stations which it is considered has similar characteristics, estimates have been made of total person kilometres of travel. A summary of the travel on arterial, freeway and all major routes is shown in Figures 4.1 to 4.6 respectively. These are reproduced with the permission and by courtesy of the City Engineer, Port Elizabeth.

During 1980, average daily person travel by private transport amounted to 2 643 000 person kilometres, which represents a decrease of 0,6% compared with the figure of 2 659 999 person kilometres of travel per day during 1979. It also denotes a drop in car occupancy as vehicle kilometres have increased.

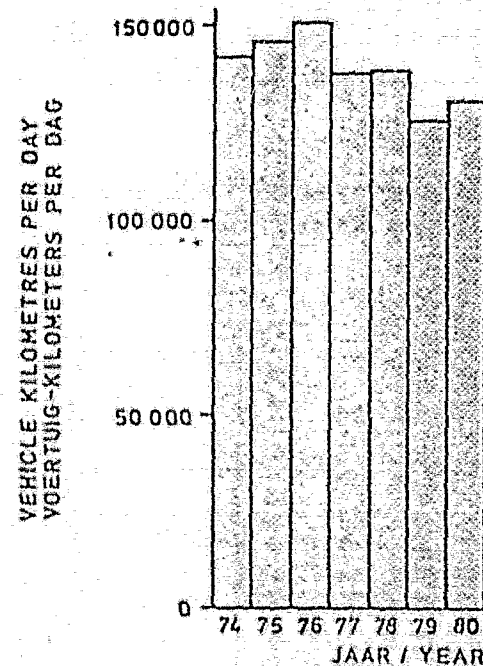
This compares with Driessen's figure of 2 685 000 in 1970, admittedly determined on a slightly different basis, an apparent change. Driessen's growth aims for road travel were 7,3% p a for white, 7,1% p a for blacks; his unadjusted



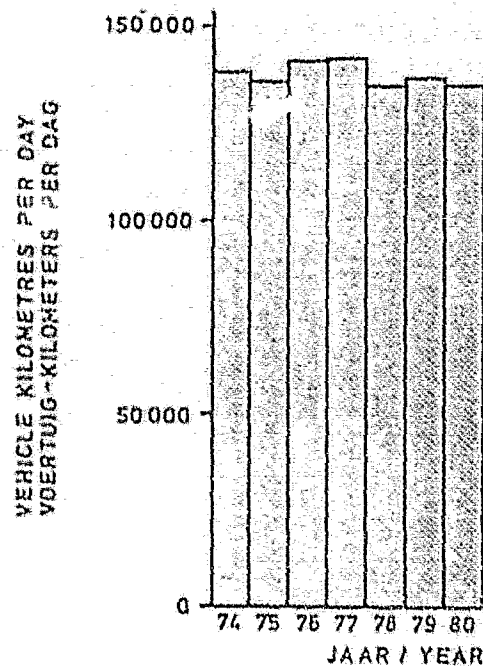
MAIN ST / STRAND ST
HOOFWEG / STRANDSTRAAT



CAPE RD / RUSSELL RD
KAAPWEG / RUSSELLWEG



P.E.-UITENHAGE MAIN ROAD
P.E.-UITENHAGE HOOFWEG



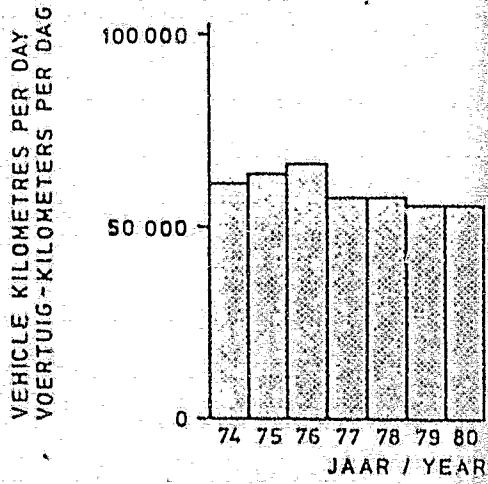
HARROWER RD / STANDFORD RD
HARROWERWEG / STANDFORDWEG

HOOFDROETES
VOERTUIG-KILOMETERS

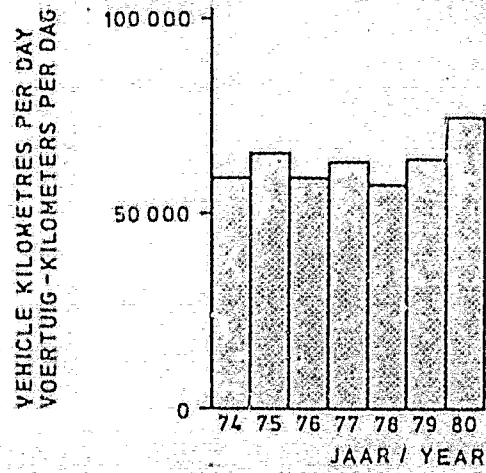
PEMET

MAJOR ROUTES
VEHICLE KILOMETRES

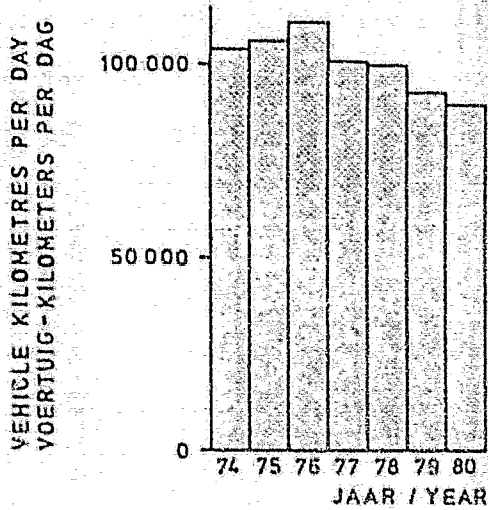
FIG 4.1



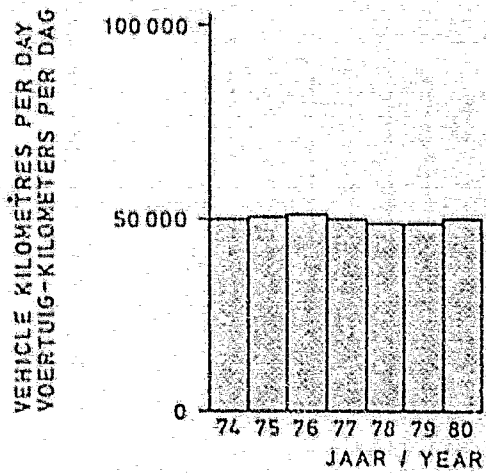
BURT DRIVE / KEMPSTON ROAD
BURTRYLAAN / KEMPSTONWEG



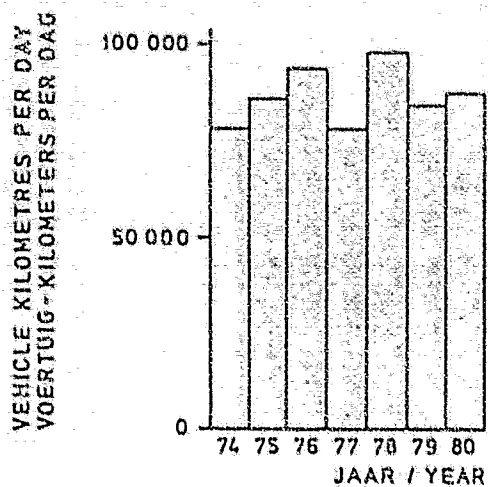
WALMER BOULEVARD - BUFFELSFONTEIN RD
WALMER-BOULEVARD - BUFFELSFONTEINWEG



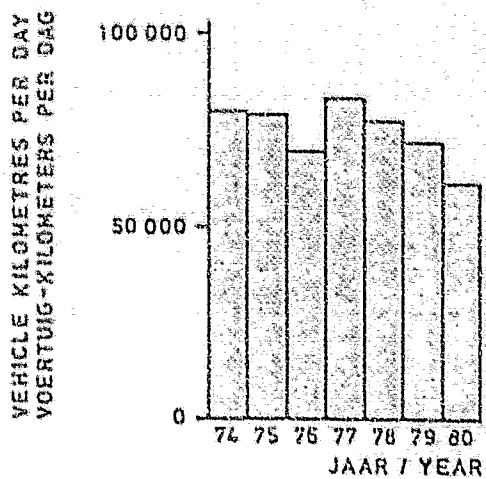
ALBANY RD - CIRCULAR DR
ALBANYWEG - CIRCULAR-RYLAAN



ALGOA RD / DURBAN ST
ALGOAWEG / DURBANSTRAAT



ADMIRALTY WAY / MARINE DR /
BEACH RD / HUMWOOD RD
ADMIRALITEITSWEG / MARINE DR /
BEACHWEG / HUMWOODWEG



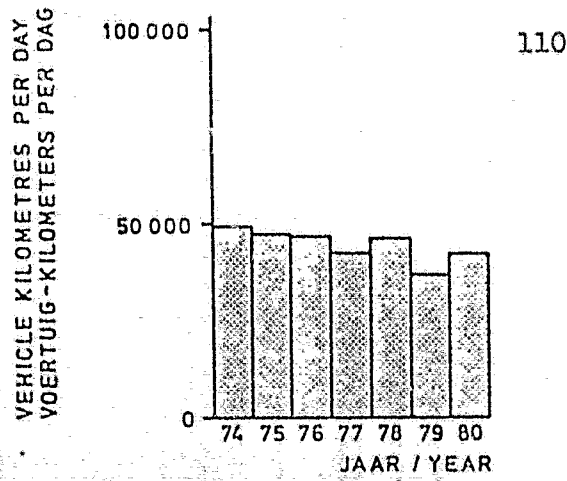
UITENHAGE RD / COMMERCIAL RD
UITENHAGEWEG / COMMERCIALWEG

HOOFFROETES
VOERTUIG-KILOMETERS

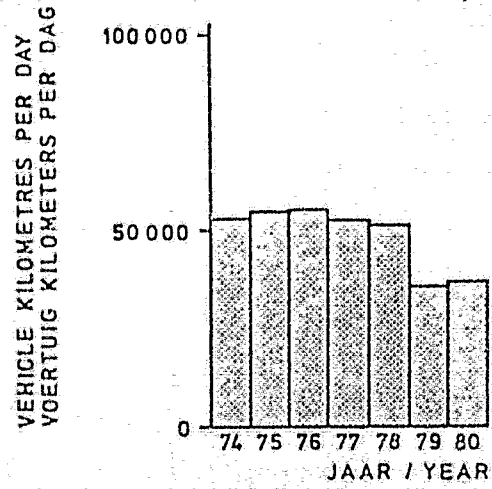
PEMET

MAJOR ROUTES
VEHICLE KILOMETERS

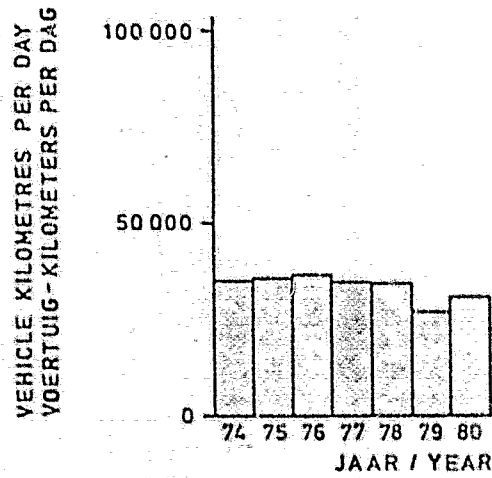
FIG 4.2



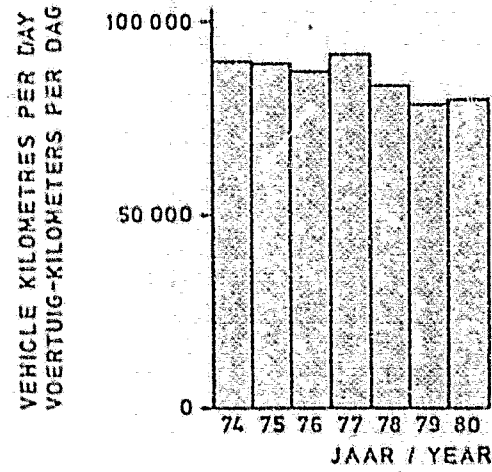
WILLIAM MOFFETT EXPRESSWAY
WILLIAM MOFFETT-SNELWEG



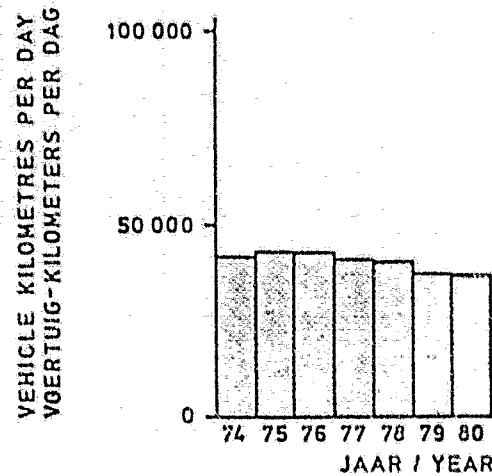
CHURCH ST / GRAAFF-REINET RD
KERKSTRAAT / GRAAFF-REINETWEG



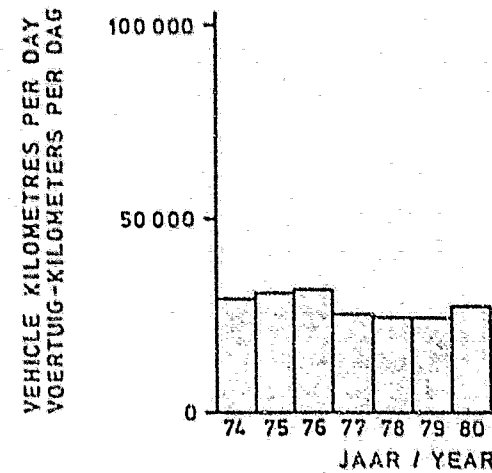
MAIN RD / BOTHA ST., DESPATCH
HOOFWEG / BOTHA STRAAT, DESPATCH



GRAHAMSTOWN ROAD
GRAHAMSTADWEG



UNION AVE / CALEDON ST
UNIONLAAN / CALEDON STRAAT



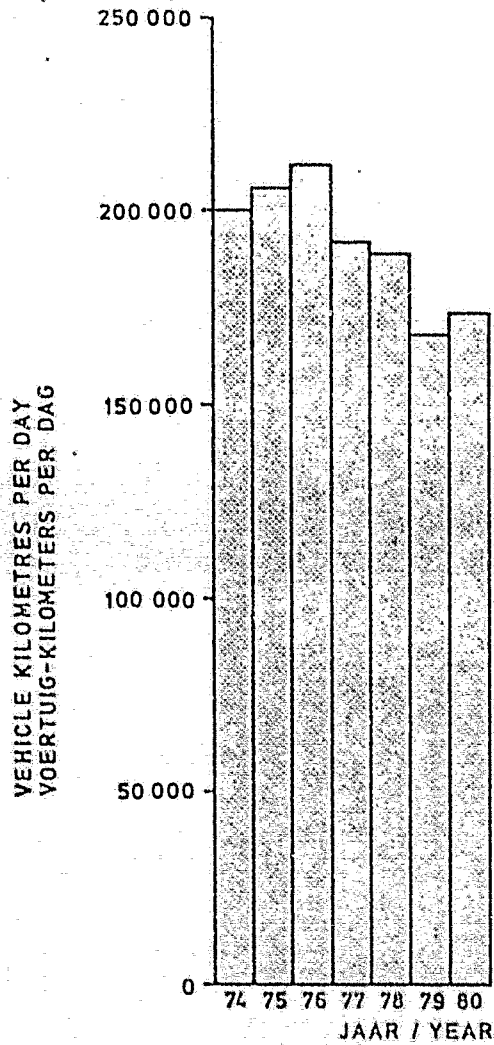
KRAGGA KAMMA ROAD
KRAGGA KAMMAWEG

HOOFROETES
VOERTUIG-KILOMETERS

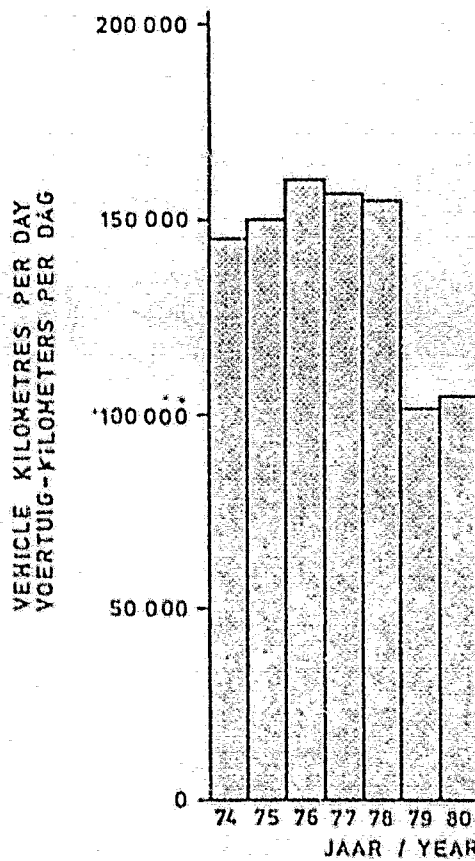
PEMET

MAJOR ROUTES
VEHICLE KILOMETRES

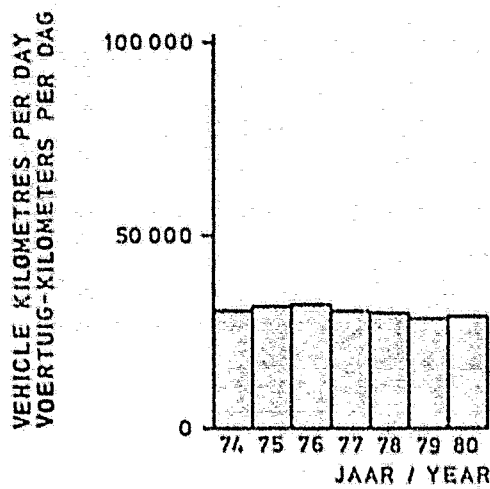
FIG 4.3



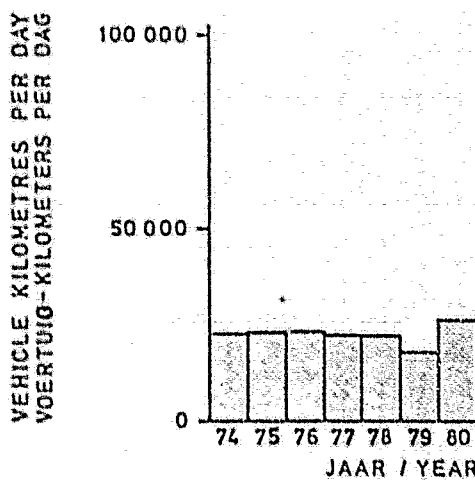
OTHER ROADS CARRYING
> 5000 VEHICLES / DAY
ANDER PAAIE WAT >
5000 VOERTUIG / DAG DRA



OTHER ROADS CARRYING
< 5000 VEHICLES / DAY
ANDER PAAIE WAT <
5000 VOERTUIG / DAG DRA



SWARTKOPS-DESPATCH RD (MR 19)
SWARTKOPS-DESPATCHWEG (HP 19)



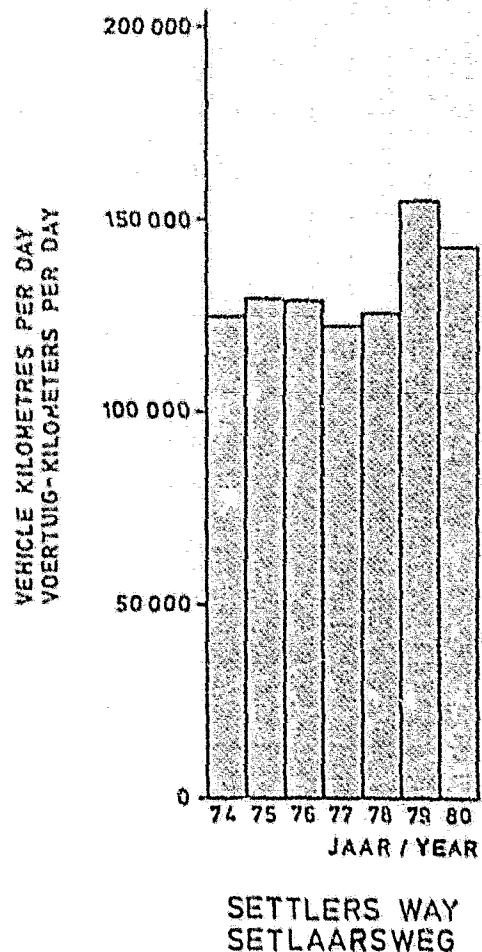
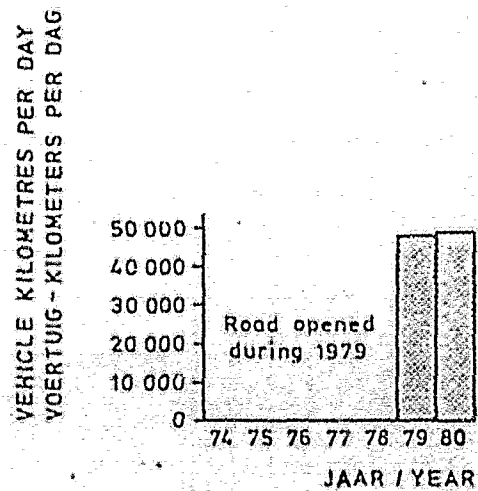
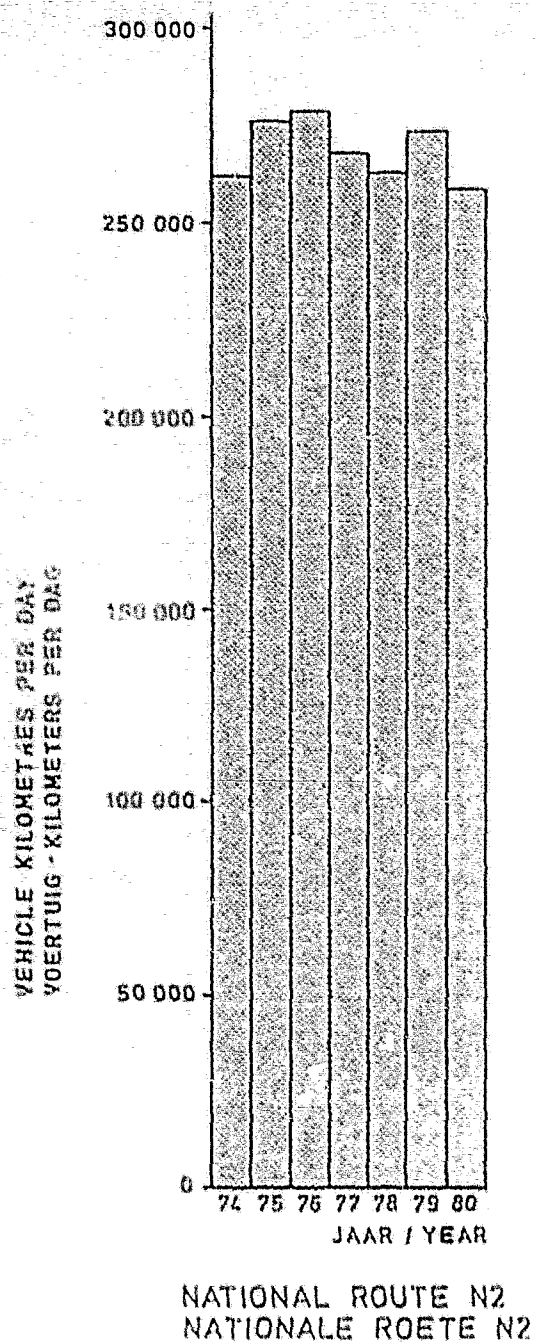
CUYLER STREET / CAPE ROAD
CUYLERSTRAAT / KAAPWEG

HOOFROETES
VOERTUIG-KILOMETERS

PEMET

MAJOR ROUTES
VEHICLE KILOMETRES

FIG 4.4

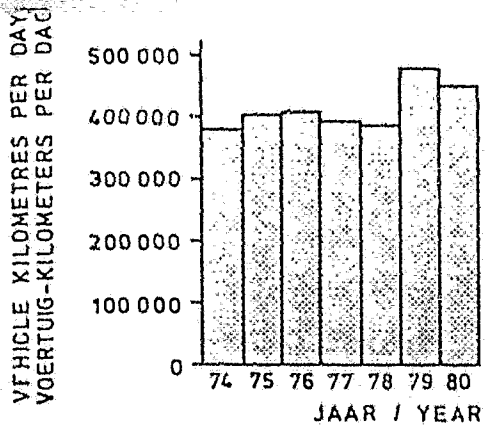


HOOFROETES
VOERTUIG-KILOMETERS

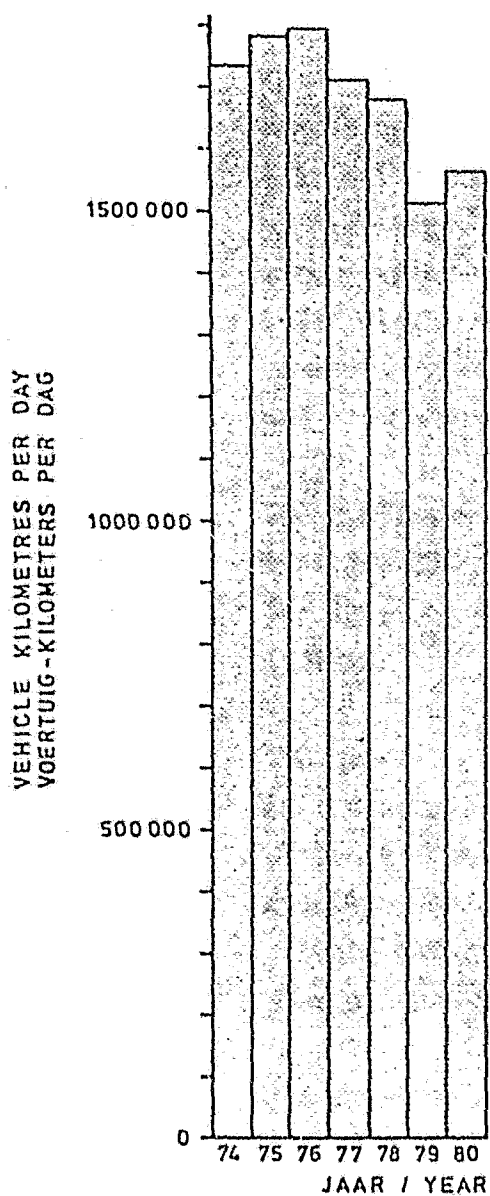
PEMET

MAJOR ROUTES
VEHICLE KILOMETRES

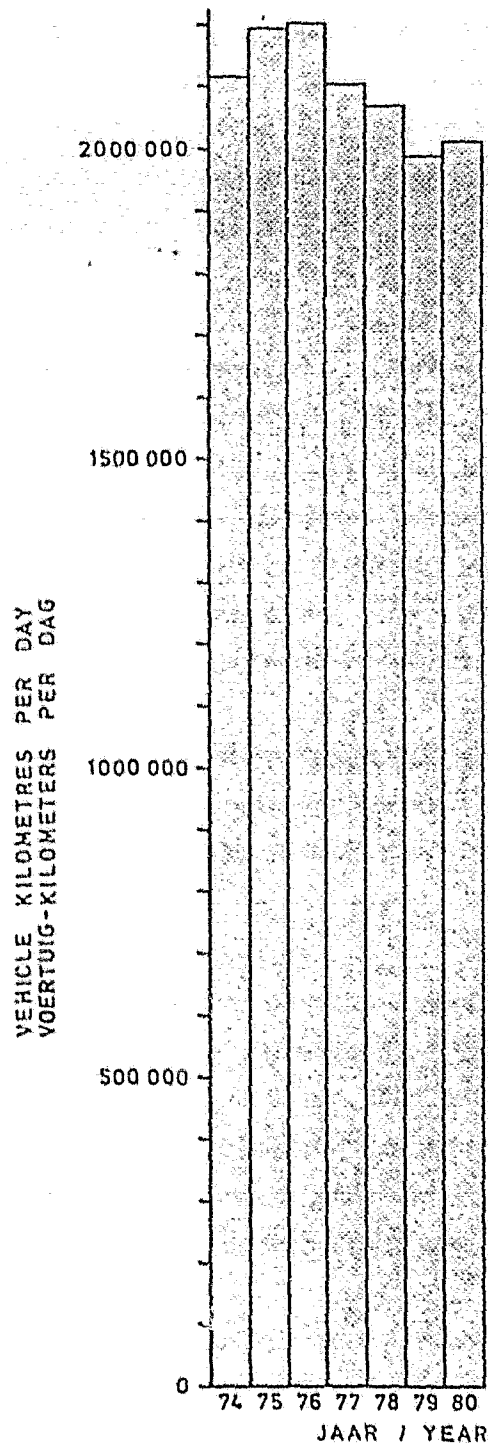
FIG 4.5



FREEWAYS
DEURPAAIE



ARTERIALS
VERKEERSARE



ALL ROADS
ALLE PAAIE

HOOFROETES
VOERTUIG-KILOMETERS
OPSOMMING

PEMET

MAJOR ROUTES
VEHICLE KILOMETRES
SUMMARY

FIG 4.6

projections for road travel were 7,5% p a, for whites, 8,3% for blacks. It must be remembered that the Driessen Committee did not aim for a total reduction in travel, but rather for a shift from private to public modes. Typical bar charts showing the pattern of vehicle travel have been given in Figures 4.1 to 4.6. These trends apply to total vehicle travel. It is necessary to look specifically at bus travel.

As at 30 June 1980, the total fleet ownership of the bus company operating in PEMET was 434 buses, which operated a total of 22,0 million kilometres during the year and carried 78,3 million passengers of all races. Of this latter figure, about 8 million passengers were carried on the 'White' area services, where surveys reveal a 40% Black and Coloured patronage. The above figures, when compared to those of 1979, show an increase of 6% in kilometres operated and a slight decline of 0,3% in passengers carried.

The PEMET monitoring team estimates that there were an average of 1 476 500 person kilometres of bus travel per day in the area. The Driessen estimate was 1 962 000 in 1970, aimed for 3 532 000 in 1980.

The overall effect compared to Driessen projections appears to be a substantial reduction in the rate of increase in total person kilometre travel during the last ten years, but with continuously declining bus usage. The expected explosion in private motor car ownership and travel, especially amongst blacks, does not appear to have occurred in the PEMET area.

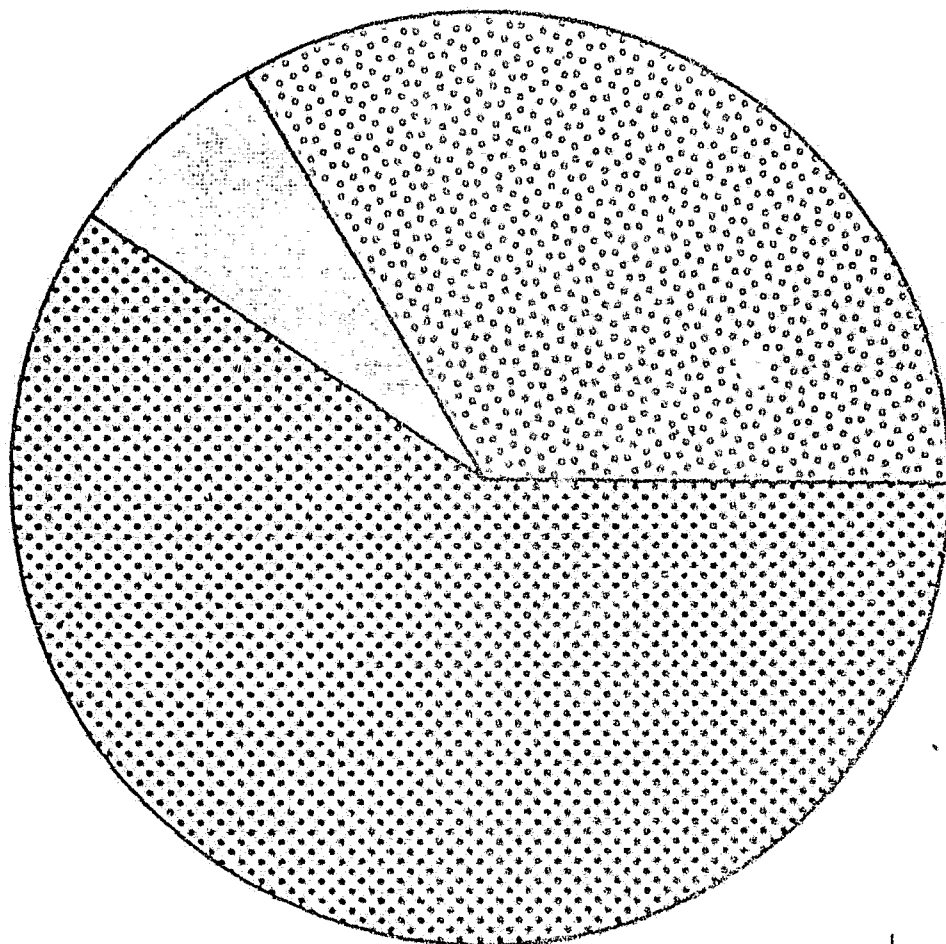
The Driessen estimate for rail travel in PEMET in 1970 was 268 000 passenger kilometres per day, increasing to 452 250 in 1980. The actual figure for 1980 is 325 000, which indicates a decline in rail travel, with respect to Driessen's targets, but an overall average increase of 6,87% p a over the decade.

Before it is possible to draw any conclusions from trends, or to measure the success or failure of various transport policies or the effectiveness of subsidies, it is essential to have some form of yardstick by which to judge any change. Despite the difficulties encountered in its measurement, especially for bus travel, person kilometres of travel appears to be the only satisfactory criteria.

Until recently the PEMET monitoring exercise has been predominantly confined to private vehicle travel. Nevertheless, the limitation on the usefulness of this information, without considering the complete spectrum of travel, is fully realised. Consequently, during 1979 a large number of pilot surveys were conducted and a suite of computer programmes was developed to analyse the information collected on bus travel. In addition, statistics of travel on the suburban rail service are now being supplied to Port Elizabeth by the South African Railways Administration on a monthly basis.

A summary of the estimates of person kilometres of travel, by mode, within the Port Elizabeth Area, for an average working day during 1980, is to be found on Figure 4.7, again produced with the permission of the City Engineer, Port Elizabeth.

This compares with Driessen's typical predictions for the area given in Table 4.2.



KEY
SLEUTEL

MODE OF TRAVEL
REISMODUS

PERSON-KM OF TRAVEL
PERSOON-KM GEREIS

% OF TOTAL
% VAN TOTAAL



Private Vehicles
Privaat Voertuie

2 643 000

59,5



Bus
Bus

1 476 000

33,2



Train
Trein

325 000

7,3

PERSOON-KILOMETER
GEREIS

PEMET

PERSON KILOMETRES
OF TRAVEL

FIG 4.7

TABLE 4.2 : Person - kilometres of travel PEMET AREA :
Percentage contributions of modes : 1970 - 2000

MODE	Driessen Projections			Present 1980
	1970	1980	2000	
Private	54,6%	60,5%	72,9%	59,5%
Bus	39,9%	36,0%	25,1%	33,2%
Rail	5,5%	3,5%	2,0%	7,3%

The total 1980 person kilometre daily travel for PEMET was predicted by Driessen as being 8 200 000. In fact it is approximately 4 444 000, or approximately 54% of that projected. While it is accepted that there is a measure of difference in the means by which the actual counts and Driessen projections were obtained, it is not of this order.

This lack of growth in private travel is supported by the cordon counts which are shown graphically in Figs 4.8 and 4.9. Indications are that the decline experienced from 1975 to 1979 may now again be reversed to a more naturally expected increase.

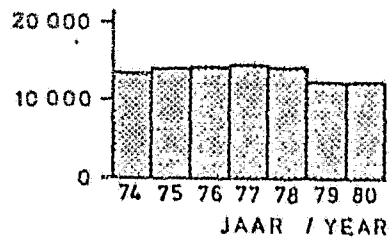
Figure 4.10 shows the steady growth in air travel, while Figure 4.11 reveals that the number of taxis in the area has remained constant since 1979.

4.1.3 Summary discussion on PEMET

The indication is that the following trends have been experienced in the PEMET area over the ten year period 1970/80:-

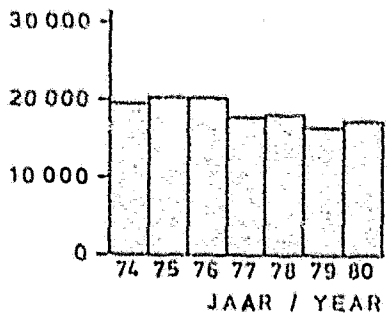
- total travel has remained relatively constant
- private travel has remained constant or decreased

JGDV OOR KORDON
AADT CROSSING CORDON

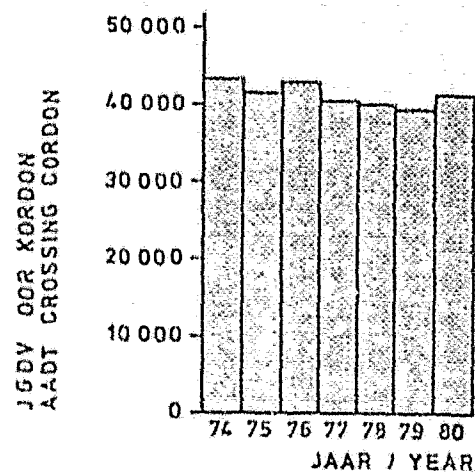


NORTHERN CORDON
NOORDELIKE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON

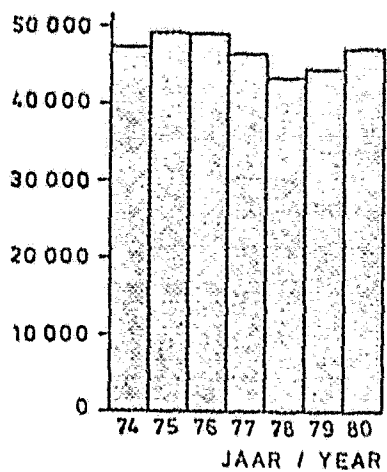


NEW BRIGHTON CORDON
NEW BRIGHTON KORDON



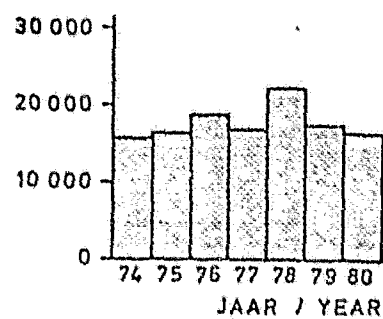
NORTH-WESTERN CORDON
NOORD-WESTELIKE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



WESTERN CORDON
WESTELIKE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



SOUTHERN CORDON
SUIDELIKE KORDON

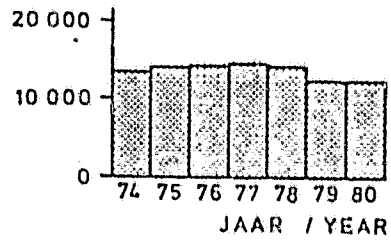
HOOFPAD - KORDON
VOERTUIGTELLINGS

PEMET

HIGHWAY CORDON
VEHICLE COUNTS

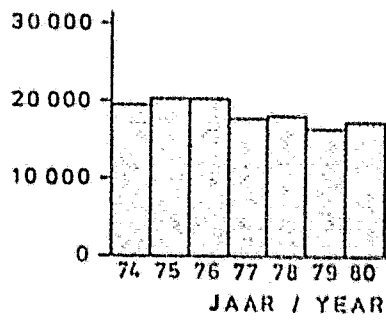
FIG 4.8

JGDV OOR KORDON
AADT CROSSING CORDON



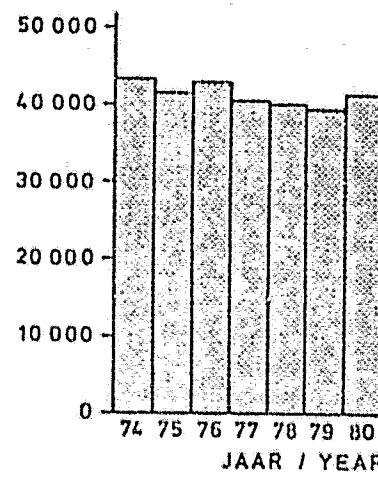
NORTHERN CORDON
NOORDELIKE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



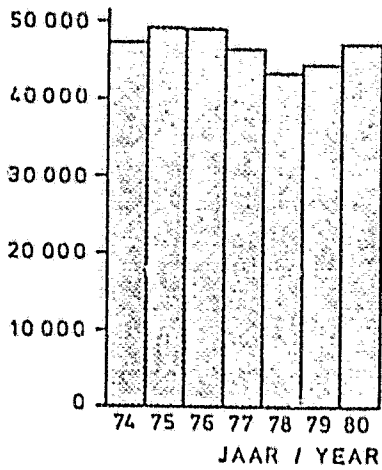
NEW BRIGHTON CORDON
NEW BRIGHTON KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



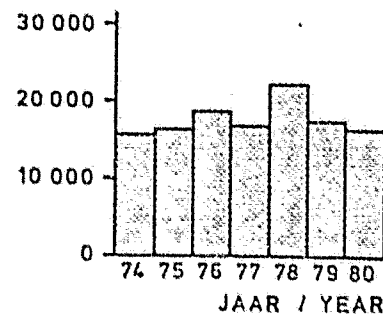
NORTH-WESTERN CORDON
NOORD-WESTELIKE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



WESTERN CORDON
WESTELIKE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



SOUTHERN CORDON
SUIDELIKE KORDON

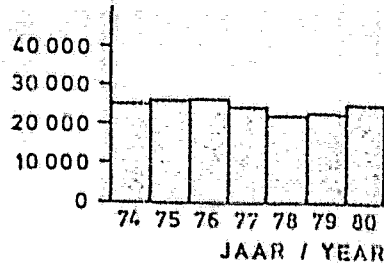
HOOFPAD - KORDON
VOERTUIGTELLINGS

PEMET

HIGHWAY CORDON
VEHICLE COUNTS

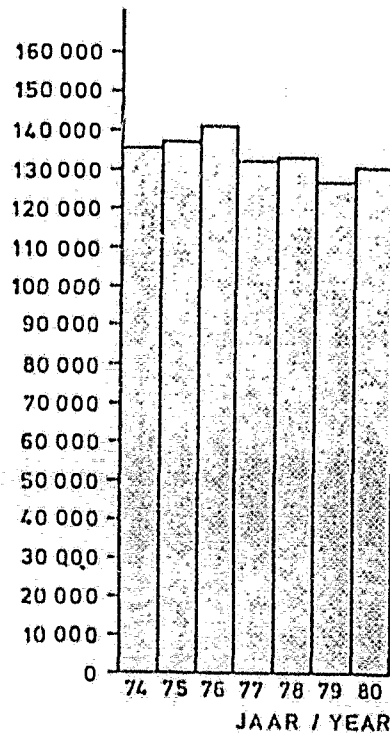
FIG 4.8

JGDV OOR KORDON
AADT CROSSING CORDON



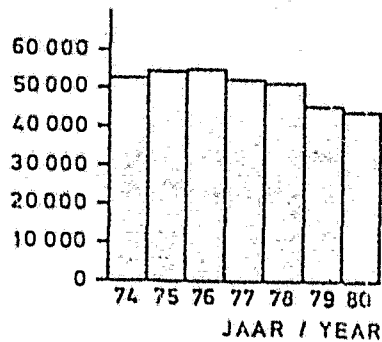
MTA BOUNDARY CORDON
MVG GRENS KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



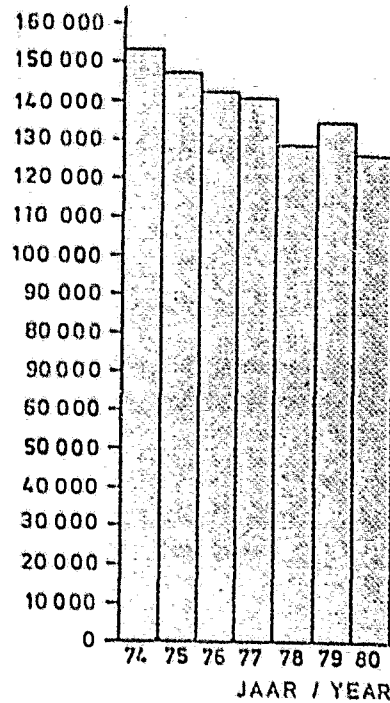
INTERMEDIATE CORDON
TUSSENKORDON

JGDV OOR KORDON
AADT CROSSING CORDON



UITENHAGE CORDON
UITENHAGE KORDON

JGDV OOR KORDON
AADT CROSSING CORDON



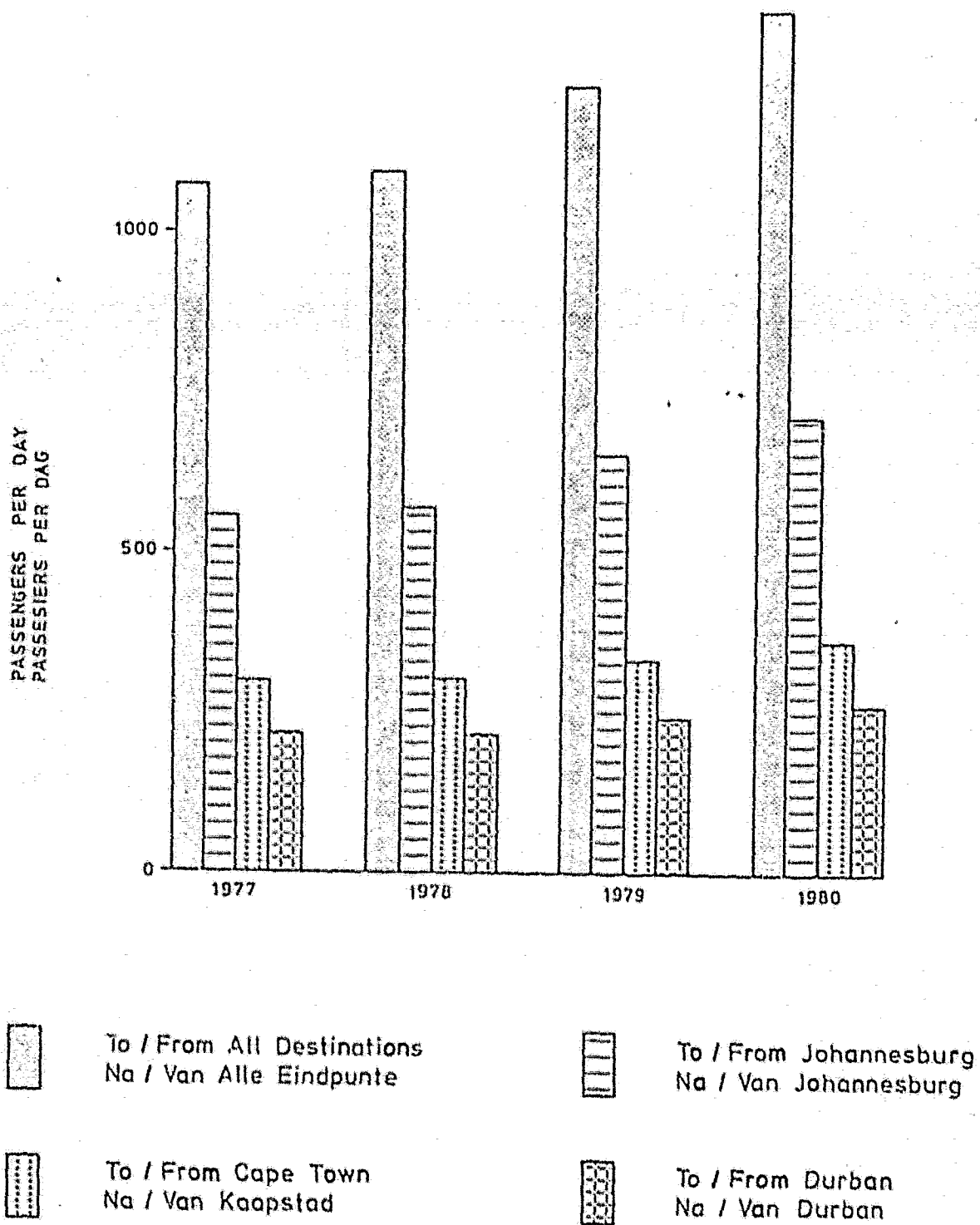
CBD CORDON
SSG KORDON

HOOFPAD-KORDON
VOERTUIGTELLINGS

PEMET

HIGHWAY CORDON
VEHICLE COUNTS

FIG 4.9

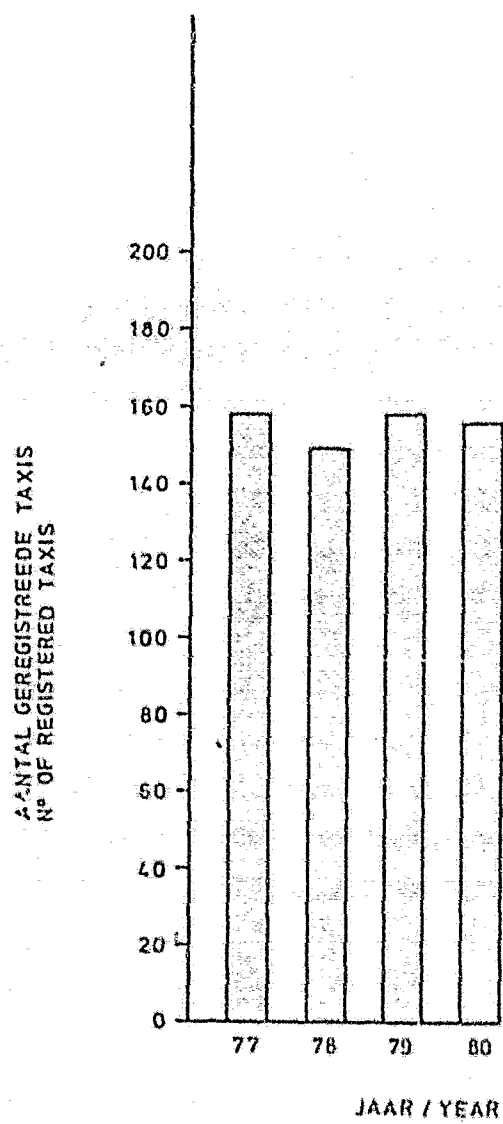


VLEIETUIGRITTE OP 'N
GEMIDDELDE WEEKDAG

PEMET

AIR TRAVEL
ON AVERAGE WEEKDAY

FIG 4.10



GEREGISTREEDE TAXIS PEMET REGISTERED TAXIS

FIG 4.11

- public bus travel has decreased slightly;
- public rail travel has increased slightly;
- goods vehicle travel has increased notably;
- there has not been the black private car ownership explosion envisaged, although there has been a considerable growth in mini-buses;
- there has been a tremendous relative increase in the use of motorcycles, however, this comes from a relatively small base and is not yet significant when it comes to total numbers;
- total travel, and especially private travel, appears to again be on the increase from 1979/1980.

One could argue that the effects of the Driessen investigation and Central Government participation have thus been successful if measured in terms of total travel, but unsuccessful in terms of getting people to change mode from private to public, especially to bus. It is suggested that such an argument is naive.

The changed travel patterns are more likely attributable to:-

- general level of economic prosperity in the case of total travel. The general stagnation of the economy through the 70's until the boom in 1979/80 is closely followed by total travel behaviour;
- a more realistic public view of private travel, enforced through rising costs and lower disposable incomes, accounts for the decrease in private travel. This is accentuated by the white school population having now become static, and one stop shopping trips being encouraged by the hypermarkets which are generally situated in the residential areas, which in turn were the greatest contributors to unnecessary private travel in the past;
- the decrease in bus ridership is merely the extension of the trend since 1945. It is significant that recent awareness by managements of the need for a marketing philosophy rather than one of operating dominance appears to be leading towards more attractive services and slightly increasing ridership in some areas;

- rail travel is a more attractive public option than bus travel. According to Dr Vuchan Vuchic this is due to the higher speeds permitted by reserved rights of way and the security and peace of mind afforded the rider ('At least I know where these tracks will take me!'). It is to be expected that of those commuters making the change from private to public mode, be it for reasons of choice or reduction in disposable income, more will choose rail than bus;
- with regard to the increase in goods travel it is inevitable that with the increasing industrialisation of the South African economy, and with the increasing rationalisation of railway operations in their accepting their bulk moving role and consequently permitting more freedom of road movement of goods, a growth in this type of traffic will occur;
- that the non-occurrence of the Black owned private car explosion has become evident can only be attributed to the fact that inflation is making inroads into Black disposable incomes as fast as the wage gap is narrowing. This does not detract from the fact that, throughout the country, the commuter congestion and lack of capacity problems exist primarily on those facilities linking Black residential areas with White dominated work places;
- motorcycles are an alternative for the private trip maker who sees inroads into his disposable income but who is not prepared to move to car pools or to public transport, or who does not have public transport services available. The growth in motorcycle ownership in the country will be an interesting measure of consumer resistance to car pooling or public alternatives;
- the renewed increase again in private and total travel in 1979/80 is not, in the author's opinion, an indication of people becoming used to higher operating costs. It is rather a following of the economic prosperity of society. More work to be done, leads to more trips being made; higher disposable income, leads to a greater propensity and inclination to make trips;

- a word is not out of place on the constant number of licenced taxis operating during the period. This is attributable to artificial constraints imposed by the Local Road Transportation Boards, influenced heavily, if one is to be honest, by the taxi owners' associations. The artificial suppression of demand is seen in the growth of mini-buses (the ubiquitous 'pirate taxi') of 3,2% per annum. These fill a dual role, albeit an illegal one, of providing a roving taxi service together with a better 'bus' service than that provided by the bus operators. Added to this the latent demand of Blacks who would prefer to buy their own private car but, due to other inflation-caused financial restrictions must compromise by making use of a mini-bus door to door service. An acceptance of the need by authority for roving taxis and by bus operators of the need for public market oriented services is all that can slow this potentially phenomenal growth, witnessed throughout the country;
- while not strictly urban transportation, mention must also be made of the steady increase in air travel. Obviously this will continue until, and if, Dr Kobus Loubsher (General Manager, SATS) can get his express passenger trains operational.

A glance at the points above reveals that, while the Driessen Report, White Paper and Urban Transport Act drew the attention of transportation professionals towards a common thought and monitoring process, the effects on the travelling public were, without exception, extraneous to this effort. The man in the street is affected by economic trends, disposable income, the ease of obtaining finance, and satisfying his personal needs and desires. The effect of any authority in trying to influence public behaviour is, as to be expected, nil.

All that the transport professional can hope to do is correctly identify travel behaviour patterns and meet these demands accordingly. This can only be effectively realised through sound monitoring, true public participation and an objective, realistic view of the future. Typical of this lack of influence

on travel behaviour has been the effect of the various staggered working hours committees around the country. At the risk of appearing churlish, the only positive influences witnessed have been the changing of lecture times at the University of the Witwatersrand and the staggering of different office hours in government departments in Pretoria. While the effect in Johannesburg is not known, that in Pretoria, with a 60% public servant workforce, has been apparently merely to shift 60% of the peak travel forward by one hour.

Following on the American/Canadian experience (TRB Conference, 1980) flexitime is a far more effective method of staggering demand than staggering of working hours. It also meets the philosophy expressed above in endeavouring to meet disaggregated public demand rather than prescribe to the transport user.

The above discussion is summarised in Chapter 5 of this dissertation. However, before completion of this section it is necessary to consider the JOMET experience, at the other end of the spectrum.

The Driessen Committee determined that PEMET's travel amounted to 5% of the Country's total urban person kilometer travel in 1970, through 1980, to 2000. We thus have an effective 5% sample if considering PEMET's figures alone. The population distribution of PEMET, and its characteristics, are generally representative of the country as a whole, with the possible exception of the PWV area, which has a greater relative level of economic activity and, according to latest HSRC findings, is serving as an ever increasing magnet to South Africa's economically active population. This implies that total travel, both in goods and private modes, may have increased more in the latter area during the decade. Unfortunately complete data for purposes of detailed comparison is not yet

available for JOMET, however, the following section looks at that data that is currently available.

4.1.4 Comparison of 1977 vs 1981 travel in JOMET

Again we must remember that the Driessen Report was published in 1973, the White Paper in 1975 and the Urban Transport Act in 1977. The JOMET area was declared in 1978 and first received implementation subsidy in the 1979/80 government financial year. Unlike the cities of the Cape Province, JOMET does not at this time receive financial assistance from the Province.

A swing is however, evident towards the Province making contribution. This is to be welcomed. Practical financial constraints have thus far not permitted a contribution to be made.

The JOMET data is collected, as is the case in all declared metropolitan transport areas, with the same aims in mind as those described in the PEMET 1980 annual statistics, given in section 4.1.3 of this report.

The total population of the JOMET area as predicted in 1975 from the 1970 census was 2 103 790, divided between the various race groups as follows:- 17

834 332 White
113 387 Coloured
55 498 Asian; and
1 100 573 Black persons.

The total population is thus 3,2 times that of PEMET, the bulk of this coming from the White (4,5 times greater) and the Black (3,8 times greater) groups.

Author Copley P J

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