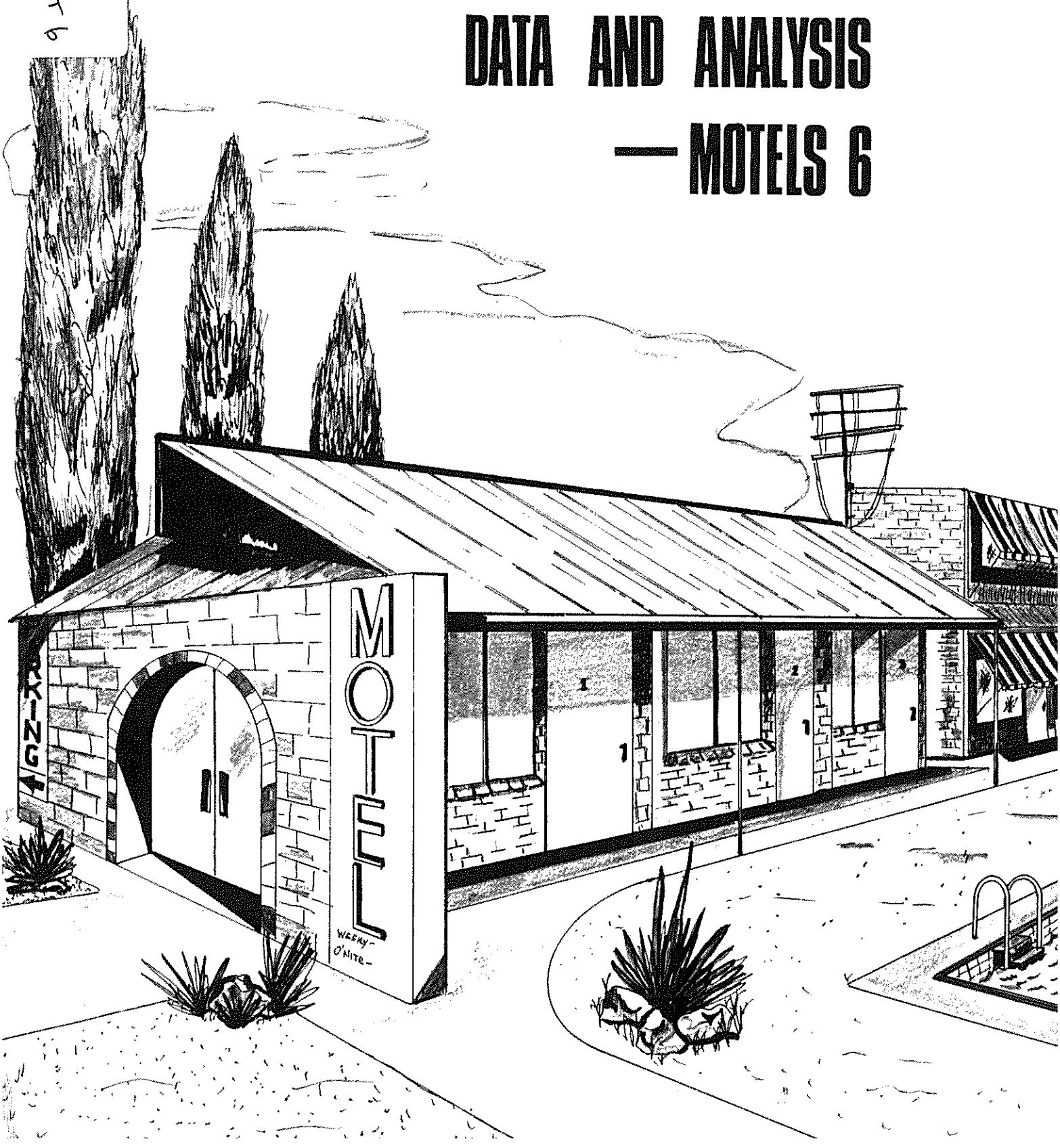
TRAFFIC
AUTHORITY OF
NEW SOUTH WALES

LAND USE TRAFFIC GENERATION DATA AND ANALYSIS —MOTELS 6



LAND USE TRAFFIC GENERATION

DATA AND ANALYSIS 6

— MOTELS

Prepared by :-
TRAFFIC AUTHORITY OF
NEW SOUTH WALES,
52 ROTHSCHILD AVENUE,
ROSEBERY N.S.W. 2018.
TELEPHONE (02) 663 0725
In association with :-
N.S.W PLANNING & ENVIRONMENT
COMMISSION.

DECEMBER, 1979.

ISBN 0 7240 4788 3

D. WEST, GOVERNMENT PRINTER, NEW SOUTH WALES 1980

Foreword

This report documents the data and analysis at one of a series of studies of traffic generation of particular land use types, conducted by the Traffic Authority of N.S.W. in association with the New South Wales Planning and Environment Commission.

The information contained herein is expected to be of value to developers, councils and interested authorities in assessing the traffic impacts of proposed developments. This report does not represent any policy or standards of either the Traffic Authority or the Planning and Environment Commission. The latter are contained in the Traffic Authority's "Policy and Standards for Traffic Generating Development".

C O N T E N T S

SUMMARY

The aim of this Data and Analysis is to quantify the traffic generation characteristics of motel developments. Linear regression models were developed to enable predictions to be made for proposed new developments.

Use of the models should take into consideration their accuracy and the ranges for which they are applicable. In situations where a proposed development has very similar characteristics and location to one of the survey sites, a direct comparison of the developments might prove more accurate than an application of the analysis models.

Table (i) lists the models developed. The accuracy of each equation is represented by the "fit" or R^2. (An R^2 of 0.90 means that 90% of the variation in the dependent variable - specific impact being predicted - is explained by the independent variable).

Figure (i) - Motel Flow Diagram illustrates the overall uses of the models.

Table (i)

MOTEL MODEL

SPECIFIC IMPACT	INDEPENDENT VARIABLE USED FOR PREDICTION	EQUATION	FIT R^2	RANGE OF INDEPENDENT VARIABLE
Peak Person Trips, PPT	Floor area - building, A_B	$PPT=4+0.027A_B$	0.88	550-3400
Total Vehicle Trips, TVT	Floor area - building, A_B	$TVT=-8+0.067A_B$	0.94	"
Peak Vehicle Trips, V	Floor area - building, A_B	$V=1+0.015A_B$	0.92	"
Peak Vehicle Trips - IN, V_I	Floor area - building, A_B	$V_I=0.007A_B$	0.85	"
Peak Vehicle Trips - OUT, V_O	Floor area - building, A_B	$V_O=2+0.007A_B$	0.88	"
Vehicle Trips - a.m. peak, V_A	Employees, E	$V_A=-2+1.76E$	0.88	2-18
Vehicle Trips - a.m. peak, V_A	Floor area - building, A_B	$VA=0.009A_B$	0.80	550-3400
Vehicle Trips - p.m. peak, V_P	Floor area - building, A_B	$V_P=1+0.008A_B$	0.90	"
Parking Supply Required, PS_R	Number of Units, N Employees, E	$PS_R=N+0.5E$	-	-

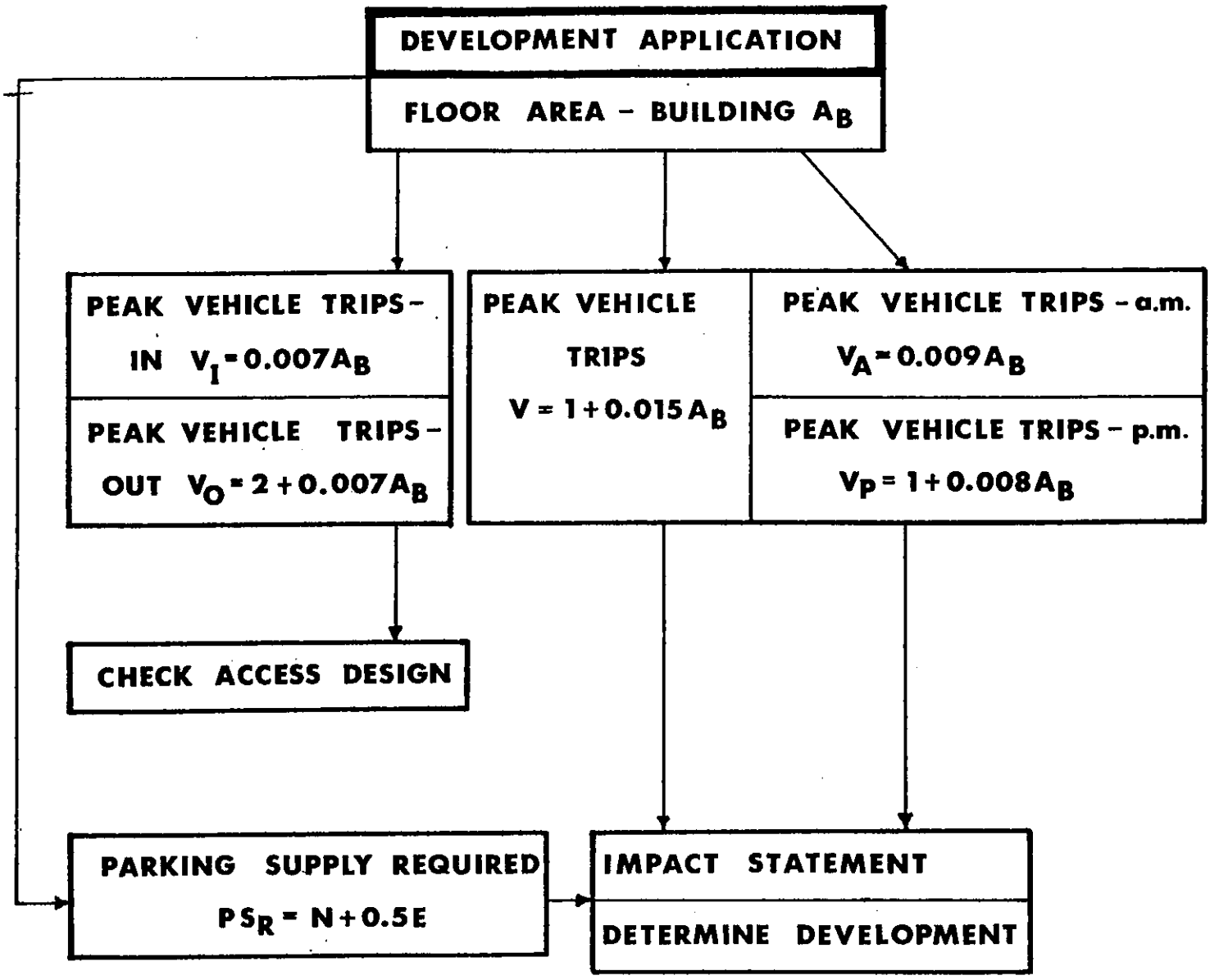


Figure 1 MOTEL FLOW DIAGRAM

1. INTRODUCTION

The aim of this Data and Analysis is to quantify the traffic generation characteristics of motel developments. This report presents the results of the surveys conducted, together with an analysis of the base data. The surveys gathered information on the following important factors:

* the vehicular flow rates produced by the development at the time of peak flow on the adjacent street system;
* the peak vehicular flows generated by the motel and the time of day at which these peaks occur;
* the parking provision necessary if the parking demand is to be met without constraint.

This report is one of a series of reports on individual land uses and is supplementary to the Traffic Authority publication titled "POLICY AND STANDARDS FOR TRAFFIC GENERATING DEVELOPMENT", which gives generalised advice on development policies, parking requirements and site access geometric standards. This report on the other hand provides a better numerical basis for the estimation of traffic generation than the above. The analysis has been carried out using multiple linear regression techniques. These results must be used with caution, taking due consideration of the stated accuracy of each of the models and the ranges over which each are applicable. In situations where a proposed development has very similar characteristics and location to one of the survey sites, a direct comparison of the developments might prove more accurate than an application of the analysis models.

2. SURVEY METHODOLOGY

2.1 Selection of Survey Sites

Ten examples of motels were selected for study. A long list of possible sites was chosen first, from which a short list was produced by considering the following desirable characteristics:

1. On-site parking provision.
2. Fairly recent construction.
3. Ease in isolating the site from other developments, for survey purposes.
4. Availability of data and simplicity of collection.
5. Geographic spread.
6. For sites with public restaurants, restaurant traffic must be able to be separated from motel traffic.

2.2 Survey Procedure

The data in this report has been collected in two ways. First, from a site inspection and interview with the site manager and secondly, a count of vehicles and persons entering and leaving the site during one day. The site inspection yielded the data for deriving site descriptions, site layout plans and data about areas, dimensions, the number of entrances and parking supply and the availability of off-site parking. Areas and dimensions were measured up at the site inspection.

The management at each site was asked to supply information about the number of motel units, the accommodation capacity, employees, peak seasons and the peak day and time. Also they were asked about the number of guests at the motel and the number of units occupied on the night prior to and the night of the survey of vehicles and people.

The vehicle and person counts were conducted between the hours of 7.00 - 10.00 a.m. and 4.30 - 8.30 p.m. for each site. Because the management of almost all the motels stated that there was no particular peak day, the motels were sampled on different days during the same week.

The counters recorded the number of vehicles and persons entering and leaving each site within each 15 minute period. Also they counted cars parked on-site within each 15 minute period. Also they counted cars parked on-site at the beginning and the end of each period, so that parking accumulation could be calculated for each period. Both sets of results have been presented in half hour intervals.

2.3 Data Collected

Site Data

'The area' of the site is calculated from measurements made during the site inspection. Measurements were also made of 'the Area of Buildings' and the 'Frontage to the Main Road'.

The 'Number of Motel Units' is the number of separate accommodation units at each site.

'Accommodation Capacity' is the number of bed spaces at the motel calculated as the number of single beds, plus two times the number of double beds, i.e.

Accommodation Capacity = Single beds + double beds x 2

'Parking Supply' refers to the number of on-site parking spaces at each motel.

The 'Availability of Off-site Parking' is a subjective judgement of off-site parking availability near the particular site. The ranking is based on the percentage of potential parking spaces on the main road, in side streets and other off-site areas, which are within 100 metres walking distance of the site and which are legal and not restricted to less than 1 hour in non-peak periods. The ranking is as follows:

- High: Above 50% of potential spaces are legal and not restricted to less than 1 hour parking.
- Medium: 25 - 50%
- Low: 0 - 25%

The AADT for each site is the 1977 AADT from the Department of Main Roads Publication 'Traffic Flow Maps 1977', using the nearest traffic counts to the particular site.

Trip Generation and Parking Accumulation

The average hourly generation rate for each category; people and vehicles for each direction; in and out is the total of that count divided by the number of hours over which the survey was conducted (i.e. seven hours).

The average hourly morning generation rates are obtained by dividing the number of persons or vehicles in the particular direction by the number of survey hours in the morning (i.e. three hours). The averaged hourly afternoon generation rates are derived by dividing the afternoon counts by the number of hours surveyed in the afternoon (i.e. four hours).

Parking accumulation is calculated by adding the inflow of vehicles less outflow to the number on site at the beginning of each survey period.

The parking accumulation is the maximum number of cars calculated to be on-site at any hour during the survey. The hour at which that maximum occurs is the peak time.

Peak utilisation is the peak accumulation divided by the on-site parking supply from the site data sheet expressed as a percentage.

Motel Occupancy

The Occupancy Statistics at the Time of Survey refers to person occupancy and unit occupancy at each motel on the night of and the night prior to the vehicle and person counts.

Occupancy is the percentage of the total number of motel units which were occupied on that night. The Percent of Accommodation Capacity Occupied, is the number of persons registered at that motel on that night divided by the Accommodation Capacity and expressed as a percentage.

Summary Table

The summary table covers:

- Site Data
- Trip Generation and Parking Accumulation

The Site Data and Trip Generation and Parking Accumulation tabulations present the same variables as explained previously for each individual site.

3. ANALYSIS

3.1 The Analysis Problem

The analysis of the motel data involved two major tasks. The first task was the establishment of a set of hypothesies which would form an adequate theory to explain the interaction between the land use system, motels and the transportation system. Of particular concern within the transport system was the impact upon vehicular traffic and associated parking characteristics. The second task was to test the theory against the observed behaviour and to develop relationships which could be used to both explain observed behaviour and to predict likely reactions to alternative conditions.

In selecting the ten survey points two objectives were set; firstly ten appeared the minimum survey number that would allow statistically significant relationships to be developed and secondly ten sites would allow a broad spread of size, type and location. Perfect prediction accuracy cannot be guaranteed from a sample of ten sites. Nevertheless there is confidence that the results from the analysis are applicable to practical situations and are as good as any results that could have been expected.

3.2 Statistical Background

In consideration of the relatively small number of sample points, the use of complex statistical methods was not considered appropriate, particularly in view of the intended general use of the results. The emphasis was thus on simpler manipulations based on multiple linear regressions with at the most four independent variables. (Four is considered the maximum on the basis that to obtain reasonable results one should have at least 2k + 1 sets of observations, where k is the number of independent variables).

The multiple linear regression equation is of the form -

$$Y = a(0) + a(1)x\ (1) + a(2)\ x\ (2) + \cdots + a(k)\ x\ (k)$$

where Y is the dependent variable - the particular parameter you wish to predict, for example the peak parking accumulation at the motel - and x(1) to x(k) are the independent variables used for the prediction. As their name implies, independent variables should ideally have no relationship with each other. Examples of independent variables are floor area and number of units. It is an important point to remember that the equation is only valid within the ranges of values of the independent variables which were used to derive it. Thus although a(0) may be non-zero in a given equation it does not imply that the equation is valid when all the independent variables are zero.

The degree of accuracy of the regression equations is represented by the correlation coefficient, R^2, where

$$R^2 = \frac{A}{B}$$

where

A = variation in Y explained by the combined linear influence of the independent variables.

B = total variation in Y.

Thus if the R^2 for an equation is 0.85, then it means that 85% of the variation in the dependent variable can be explained by the independent variables. An R^2 of 1.0 is a perfect fit. An "acceptable" R^2 should generally be greater than 0.80.

In addition to an acceptable R^2, the independent variables must not be highly intercorrelated. If this condition exists then there is no acceptable way of performing a regression analysis with the given set of independent variables.

The equations that are presented satisfy the above conditions, for use in the ranges of independent variables stated.

3.3 Data Analysis

Table 3.1 represents a summary of the data at the ten sites.

Independent Variables

- Area of site (m^2), A_S
- Area of building (m^2), A_B
- Number of Units, N
- Accommodation capacity, AC
- Employees, E (total number, irrespective of whether they were present or not on the survey day).

These are the independent variables used to predict the dependent variables. They are, however, not sufficiently independent of each other to be used in the same equation, with one exception. The correlation matrix, which illustrates the degree of relationship between these variables (R), is given below.

CORRELATION, R

	A_S	A_B	N	AC	E
A_S	1.00				
A_B	.22	1.00			
N	.15	.82	1.00		
AC	.36	.63	.88	1.00	
E	.16	.84	.92	.72	1.00

Table 3.1

ANALYSIS DATA

ITEM \ LOCATION	SYMBOL	LIVERPOOL	WAHROONGA *	ASHFIELD	BASS HILL	SYLVANIA	BEECROFT	WEST RYDE *	PARRAMATTA	ARTARMON *	KENSINGTON
Area of Site (M^2)	A_S	10,230	2,480	2,730	3,550	2,640	1,860	4,030	830	3,050	600
Area of Building (M^2)	A_B	1,630	1,150	710	700	550	1,760	1,170	580	3,400	890
Number of Units	N	30	26	38	16	22	27	41	18	64	24
Accommodation Capacity	AC	100	77	111	31	46	75	125	48	128	57
Employees	E	8	5	8	4	4	5	8	2	18	9
Peak Person Trips	PPT	54	24	29	16	13	51	26	30	97	42
Total Vehicles Trips	TVT	81	53	67	31	17	99	71	43	231	62
Peak Vehicles Trips	V	21	12	15	7	6	28	18	11	51	20
Peak Vehicle Trips, IN	V_I	9	6	9	4	3	18	10	4	25	9
Peak Vehicle Trips, OUT	V_O	12	7	9	4	4	11	11	7	26	11
Vehicle Trips, a.m.peak	V_A	16	5	10	3	1	11	11	5	30	14
Vehicle Trips, p.m.peak	V_P	12	10	11	6	3	12	13	5	30	8
Parking Supply	PS	36	30	36	16	24	23	70	13	55	24
+Peak Parking Accumulation	PA	22	18	19	9	8	19	23	11	53	12
Car Occupancy, a.m.	OC_A	2.30	1.83	1.96	1.90	1.28	1.77	1.79	2.95	1.88	2.23
Car Occupancy, p.m.	OC_P	3.10	2.00	2.37	1.95	3.40	1.90	1.99	2.54	1.76	4.10
Peak Season	-	School Holidays	Summer Holidays	January	No Peak	Christmas	No Peak	No Peak	Christmas to Easter	February	January & Easter
Peak Day & Time	-	Friday, Saturday No Peak Time.	No Peak Day. Afternoon.	No Peak	No Peak Day. 5.00-10.00 p.m.	Saturday Afternoon.	No Peak	No Peak	No Peak Day. 4.00-10.00 p.m.	No Peak Day. 5.00-10.00p.m.	No Peak

NOTE: Unless stated to the contrary, all trip tabulations are two-way totals.

\+ See text.

* Including Restaurant.

A_B, N, AC and E thus have a strong correlation between each other, and thus cannot be used as combinations of independent variables in one equation. As can be used in combination with any one of the others. A_S and A_B are the variables which are almost always known at the initiation of a Development Application and are thus desirable prediction variables. The range of A_S is $600m^2$ - $10,230m^2$. The range of A_B is $550m^2$ - $3,400m^2$.

Dependent Variables

(i) Peak person trips, PPT - the maximum number of person trips per hour during the survey period.

Five equations were tested, each with one of the five independent variables. The accuracy of the equations, as represented by the "fit" - the correlation coefficient, R^2 - can be summarised:

PPT	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.03	.88	.58	.32	.71

Area of building, A_B is thus the best single predictor of peak person trips. In combination with Area of site, A_S - the only other independent variable it can be combined with - the resulting model offers no increase in accuracy of prediction (with the constant for A_S not being significantly different from zero). This was also found to be the case for the models for the other dependent variables. Thus a single independent variable is used in all of the models developed.

The best model for peak person trips, PPT is

$PPT = 4 + 0.027\ A_B$ $\qquad R^2 = 0.88$

The range of A_B for which this is applicable is 550 - 3,400 M^2.

Prediction of this variable is of more use for building design purposes rather than for the estimation of traffic impact.

(ii) Total vehicle trips, TVT - number of vehicle trips during survey period.

The accuracy of the five equations tested can be summarised:

TVT	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.01	.94	.58	.32	.71

Area of building, A_B is the best single prediction. The resulting model for total vehicle trips, TVT is

$$TVT = -8 + 0.067A_B \qquad R^2 = 0.94$$

Prediction of this variable is principally of use for comparison with current annual average daily traffic (AADT) at a proposed site. (This comparison is not strictly correct because TVT relates only to the survey periods 7.00 - 10.00 a.m. and 4.30 - 8.30 p.m. Most of the motel traffic would occur in these periods. In the absence of more detailed information on hourly traffic volumes, comparison of TVT with AADT is a fair indicator of traffic impact. It is, however, preferable to get more detailed hourly traffic volume information.).

(iii) Peak vehicle trips, V - maximum number of vehicle trips per hour during survey period.

The accuracy of the five equations tested can be summarised:

V	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.00	.92	.71	.42	.77

Area of building, A_B is the best single predictor. The resulting model for peak vehicle trips, V is

$$V = 1 + 0.015A_B \qquad R^{2\prime} = 0.92$$

Prediction of this variable indicates the 'worst case' situation for traffic generated by the motel in any one hour period.

(iv) Peak vehicle trips - IN, V_I - maximum number of vehicle trips entering the site in any hour during the survey period.

The accuracy of the five equations tested can be summarised:

V_I	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.00	.85	.66	.41	.64

Area of building, A_B is the best single predictor. The resulting model for peak vehicle trips - IN is, V_I is

$$V_I = 0.007A_B \qquad R^2 = 0.85$$

Predictions of this variable can be of assistance in checking driveway design.

(v) Peak vehicle trips - OUT, V_O - maximum number of vehicle trips leaving the site in any hour during the survey period.

The accuracy of the five equations tested can be summarised:

V_O	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.02	.88	.81	.50	.86

Area of building, A_B is the best single predictor. The resulting model for peak vehicle trips - OUT, V_O is

$$V_O = 2 + 0.007A_B \qquad R^2 = 0.88$$

Prediction of this variable can be of assistance in checking driveway design.

(vi) Vehicle trips - a.m. peak, V_A - vehicle trips in the survey period 7.30 - 8.30 a.m.

The accuracy of the five equations tested can be summarised:

V_A	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.05	.80	.72	.50	.88

Number of employees, E is the best single predictor. Area of building, A_B still provides an acceptable prediction. The resulting models are:

$$V_A = -2 + 1.76E \qquad R^2 = 0.88$$

$$V_A = 0.009A_B \qquad R^2 = 0.80$$

Prediction of this variable allows an assessment to be made of the impact of the development on the surrounding street system in the morning peak period.

(vii) Vehicle trips - p.m. peak, V_P - vehicle trips in the survey period 4.30 - 5.30 p.m.

The accuracy of the five equations tested can be summarised:

V_P	INDEPENDENT VARIABLES				
	A_S	A_B	N	AC	E
FIT:R^2	.04	.90	.88	.61	.83

Area of building, A_B is the best single predictor. The resulting model is:

$$V_P = 1 + 0.008A_B \qquad R^2 = 0.90$$

Prediction of this variable allows an assesssment to be made of the impact of the development on the surrounding street system in the evening peak period.

(viii) Peak parking accumulation, P_A - the maximum number of vehicles parked on-site at any point in time during the survey period.

It was found that the peak parking accumulation during the survey period was not representative of the absolute peak parking accumulation. The survey period was chosen to represent the time during which vehicle movements were greatest. However, for a motel, peak parking accumulation occurs in the middle of the night, because of the primary function of this land use. Thus the parking accumulation information collected cannot be used to calculate the optimum parking supply required. The evidence of this is seen in the unit occupancy data. At three of the sites, 100% unit occupancy occurred on both the night prior to the survey day and the night of the survey day. At these three sites, peak parking accumulation in the survey period was no greater than 73% of the number of units. This peak occurred at either the start of the morning survey period or the end of the evening survey period.

The Policy and Standards for Traffic Generating Development states a parking supply requirement at motels of a "minimum of one space per motel unit plus one space per each two employees plus one space per three seats if public restaurant is included, plus one space per three seats if function room included." This was determined because of the particular nature of the parking requirements of motels, i.e. each unit generally has a parking space assigned to it. Staff parking is separate. This requirement remains valid. In terms of the motel only, without a public restaurant or function room, this can thus be defined:

PARKING SUPPLY REQUIRED (PS_R) = 1.0 x Motel Units (N) + 0.5 x Employees (E)

The Parking Supply, PS at the ten sites did not always meet this requirement.

Other Variables

Car Occupancy varies considerably. The range in the morning is 1.28 - 2.95. The range in the evening is 1.76 - 4.10.

The Peak Season is often the Christmas school holiday period. Three motel managers reported no peak season.

The Peak Day and Time showed no consistent peak days. Peak time at half of the sites was in the afternoon/evening.

3.4 Motel Model

Table 3.2 summarises the equations which explain the operation of a motel together with the range of values for which the equations are valid. These are presented graphically on Graphs 3.1 - 3.8. Note that the graphs are only valid for the range of independent variable observed. They cannot be extrapolated with confidence. Also shown is the 90% prediction interval, which illustrates the range of variation of the predicted dependent variable at a given value of independent variable. This means that for a given independent variable - for example, building floor area - the prediction of the dependent variable - for example, peak vehicle trips - will be inside the prediction interval limits in 90% of cases. (This prediction interval should not be confused with the confidence interval. The latter is based on mean values of the data. The confidence interval is always smaller than the prediction interval.). For prediction purposes, the value as taken from the equation (or off the line of the equation on the graph), should be used, in the absence of any information indicating that a high or a low estimate would be more appropriate.

Figure 3.1 illustrates uses of the models.

3.5 Examples of Use of the Model

The following case studies are presented as a guide to the possible uses of the model. The interpretations placed on the results are examples.

Case 1 A Development Application is received to build a motel on a busy road. The floor area of the motel is given as $1600m^2$. Traffic volumes on the road are at their peak in the period 4.30-5.30 p.m. The authorities are concerned about the impact of the additional traffic generated, on the safety and efficiency of current traffic.

STEP 1 Calculate vehicle trips - p.m. peak, V_p:-

For $A_B = 1600m^2$, Graph 3.8 estimates -

$V_p = 14$(+/-5 @ 90% prediction confidence)

STEP 2 Add this traffic volume onto current peak period volumes and estimate the impact.

Table 3.2

MOTEL MODEL

SPECIFIC IMPACT	INDEPENDENT VARIABLE USED FOR PREDICTION	EQUATION	FIT R^2	RANGE OF INDEPENDENT VARIABLE
Peak Person Trips, PPT	Floor area - building, A_B	$PPT=4+0.027A_B$	0.88	550-3400
Total Vehicle Trips, TVT	Floor area - building, A_B	$TVT=-8+0.067A_B$	0.94	"
Peak Vehicle Trips, V	Floor area - building, A_B	$V=1+0.015A_B$	0.92	"
Peak Vehicle Trips - IN, V_I	Floor area - building, A_B	$V_I=0.007A_B$	0.85	"
Peak Vehicle Trips - OUT, V_O	Floor area - building, A_B	$V_O=2+0.007A_B$	0.88	"
Vehicle Trips - a.m. peak, V_A	Employees, E	$V_A=-2+1.76E$	0.88	2-18
Vehicle Trips - a.m. peak, V_A	Floor area - building, A_B	$VA=0.009A_B$	0.80	550-3400
Vehicle Trips - p.m. peak, V_P	Floor area - building, A_B	$V_P=1+0.008A_B$	0.90	"
Parking Supply Required, PS_R	Number of Units, N Employees, E	$PS_R=N+0.5E$	-	-

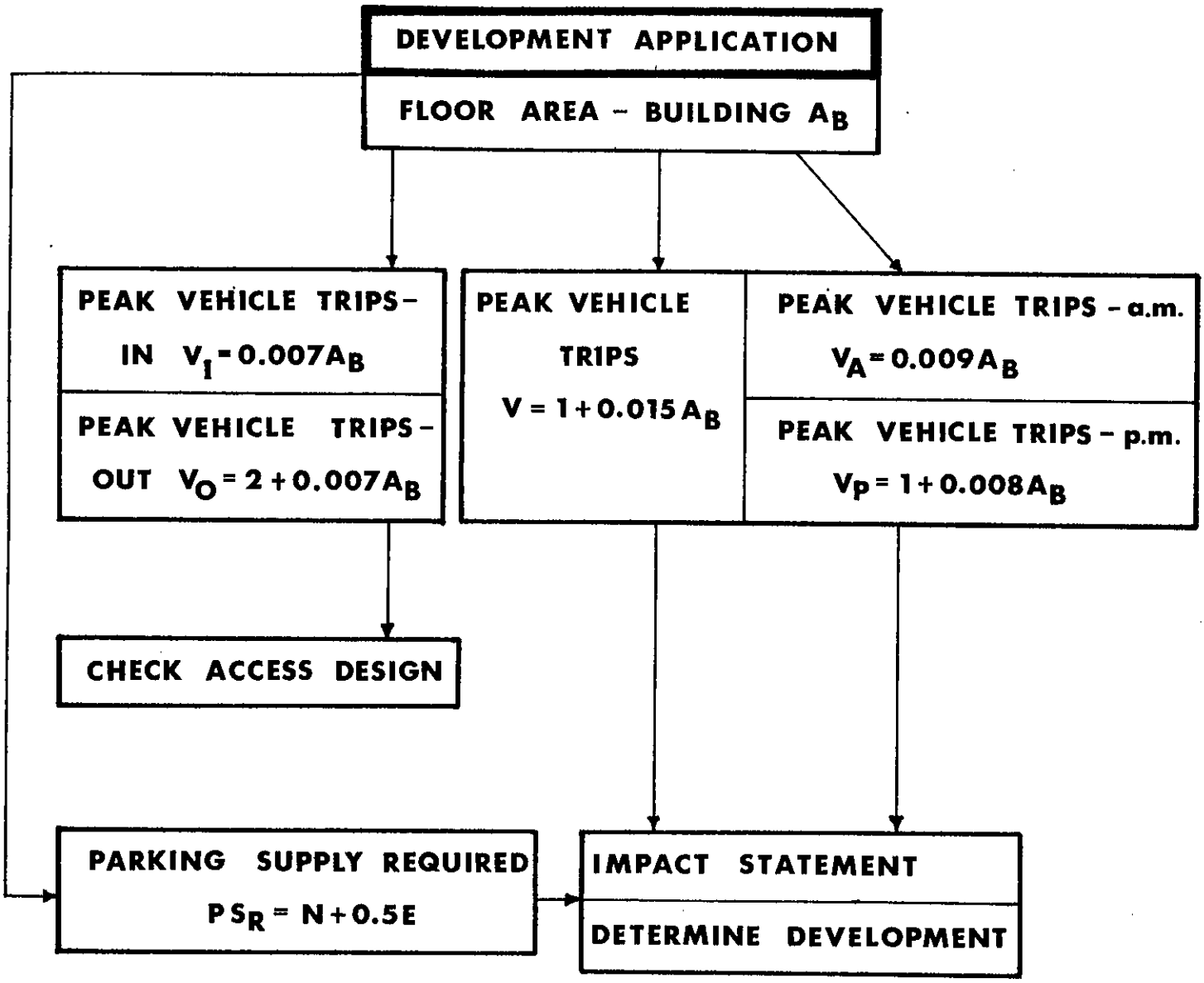


Figure 3.1 MOTEL FLOW DIAGRAM

CASE 2 A developer wishes to build a motel with building floor area of $900m^2$. However, he is concerned about the capacity of the internal driveway. As a check on this, he wishes to estimate the peak number of vehicles likely to arrive in any one hour.

Calculate peak vehicle trips - IN, V_I:

For $A_B = 1200m^2$, Graph 3.4 estimates -

V_I = 8(+/-5 @ 90% prediction confidence).

4. DATA RESULTS

4.1 Motel - Liverpool

General Site Description

The site is located on the Hume Highway south of Liverpool between Liverpool and Casula. Located on the "towards" Liverpool side of the Highway, it has a small local shopping centre on one side boundary and a service station on the other. However, the predominant land use in the surrounding area is low density residential development.

Date of Survey: 16.2.79

Time of Survey: 7.00 - 10.00 a.m., 4.30 - 8.30 p.m.

Site Data:

Business	:	Motel without public restaurant
Area of Site	:	$10,230m^2$
Area of Building	:	$1,630m^2$
Frontage to Main Road	:	119m
Number of Vehicle Entrances	:	1
Number of Motel Units	:	30
Accommodation Capacity	:	100
Peak Season	:	School Holidays
Peak Day and Time	:	Friday & Saturday, no real peak time of day
Parking Supply	:	36 spaces
Availability of Off-Site Parking	:	High
Employees	:	3 - full time 5 - part time
A.A.D.T.	:	45,400

MOTEL, LIVERPOOL

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	0	10	0	4
7.30 - 8.00	8	10	3	6
8.00 - 8.30	4	10	3	4
8.30 - 9.00	10	30	6	8
9.00 - 9.30	6	6	3	3
9.30 -10.00	3	9	2	4
4.30 - 5.00	5	0	2	0
5.00 - 5.30	5	20	3	7
5.30 - 6.00	13	5	5	3
6.00 - 6.30	4	17	2	3
6.30 - 7.00	9	12	1	4
7.00 - 7.30	9	3	2	2
7.30 - 8.00	1	0	1	0
8.00 - 8.30	5	0	0	0
Peak Hour	5.00-6.00 p.m. 6.30-7.30 p.m.	8.00 - 9.00 a.m.	8.00-9.00 a.m. 8.30-9.30 a.m.	8.00 - 9.00 a.m.
Peak Hour No.	18	40	9	12
Average Hourly	12	19	5	7
Ave. Hourly - Morning	10	25	6	10
Ave. Hourly - Afternoon	13	14	4	5

PARKING ACCUMULATION

TIME	NUMBER
7.00	22
7.30	18
8.00	15
8.30	14
9.00	12
9.30	12
10.00	10
4.30	14
5.00	16
5.30	12
6.00	14
6.30	15
7.00	18
7.30	18
8.00	17
8.30	17

Peak Accumulation : 22
Peak Time : 7.00 a.m.
Peak Utilisation : 61%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	30	30
Occupancy	100%	100%
Persons	78	82
% of Accommodation Capacity Occupied	78%	82%

4.2 Motel - Wahroonga

General Site Description

The motel is located on the western side of the Pacific Highway within walking distance of Waitara railway station. It is surrounded by detached houses and there is another motel 100 metres away on the other side of the Pacific Highway. Waitara's commercial area starts 200 metres further north along the Pacific Highway. There is a pool, public restaurant and residence for the manager on the site.

Date of Survey: 13.2.79

Time of Survey: 7.00 - 10.00 a.m., 4.30 - 8.30 p.m.

Site Data:

Business	:	Motel and public restaurant
Area of Site	:	2480m^2
Area of Building	:	1150m^2
Frontage to Main Road	:	46m
Number of Vehicle Entrances	:	1
Number of Motel Units	:	26
Accommodation Capacity	:	77
Peak Season	:	Summer holidays
Peak Day and Time	:	No particular day, busiest period in the afternoon.
Parking Supply	:	30 spaces
Availability of Off-Site Parking	:	High
Employees	:	5
1977 A.A.D.T.	:	31,920

MOTEL, WAHROONGA

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	2	2	1	1
7.30 - 8.00	0	6	0	2
8.00 - 8.30	3	6	1	2
8.30 - 9.00	3	7	3	3
9.00 - 9.30	2	7	2	4
9.30 -10.00	2	3	2	3
4.30 - 5.00	7	2	4	2
5.00 - 5.30	3	3	2	2
5.30 - 6.00	5	1	3	0
6.00 - 6.30	1	0	1	0
6.30 - 7.00	7	1	2	1
7.00 - 7.30	10	6	2	5
7.30 - 8.00	1	3	1	2
8.00 - 8.30	2	6	1	1
Peak Hour	6.30 - 7.30 p.m.	8.30 - 9.30 a.m.	4.30 - 5.30 p.m.	8.30-9.30 a.m. 9.00-10.00 a.m. 7.00-8.00 p.m.
Peak Hour No.	17	14	6	7
Average Hourly	7	8	4	4
Ave. Hourly - Morning	4	10	3	5
Ave. Hourly - Afternoon	9	6	4	3

PARKING ACCUMULATION

TIME	NUMBER
7.00	18
7.30	18
8.00	16
8.30	15
9.00	15
9.30	13
10.00	12
4.30	9
5.00	11
5.30	11
6.00	14
6.30	15
7.00	16
7.30	13
8.00	12
8.30	12

Peak Accumulation : 18
Peak Time : 7.00 and 7.30 a.m.
Peak Utilisation : 60%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	26	26
Occupancy	100%	100%
Persons	42	39
% of Accommodation Capacity Occupied	55%	51%

4.3 Motel - Ashfield

General Site Description

The site is located on Liverpool Road (Hume Highway) about 500m from the intersection with Parramatta Road. Adjacent to the site are several detached residential dwellings and residential flats as well as a squash court. The surrounding land use is primarily residential; detached dwellings and low rise flats. Commercial development on this part of the Hume Highway is limited, but along Parramatta Road commercial development, with a large component of motor vehicle oriented uses, predominates. The site is within walking distance of Summer Hill Railway Station.

Traffic on the Hume Highway is very heavy leading to and from this major intersection with Parramatta Road.

Date of Survey: 14.2.79

Time of Survey: 7.00 - 10.00 a.m., 4.30 - 8.30 p.m.

Site Data:

Business	:	Motel with no public restaurant
Area of Site	:	2730m^2
Area of Buildings	:	710m^2
Frontage to Main Road	:	45m
Number of Vehicle Entrances	:	1
Number of Motel Units	:	38
Accommodation Capacity	:	111 persons
Peak Season	:	January
Peak Day and Time	:	No particular peak
Parking Supply	:	36 spaces
Availability of Off-Site Parking	:	High
Employees	:	8
A.A.D.T.	:	22,030

MOTEL - ASHFIELD

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	1	3	1	2
7.30 - 8.00	3	9	3	4
8.00 - 8.30	1	4	0	3
8.30 - 9.00	1	10	0	4
9.00 - 9.30	8	10	3	5
9.30 -10.00	2	1	1	1
4.30 - 5.00	2	3	0	0
5.00 - 5.30	12	9	6	5
5.30 - 6.00	6	0	3	0
6.00 - 6.30	11	8	4	5
6.30 - 7.00	7	8	3	3
7.00 - 7.30	1	3	1	1
7.30 - 8.00	8	6	2	1
8.00 - 8.30	4	7	3	3
Peak Hour	5.00-6.00 p.m. 6.00-7.00 p.m.	8.30 - 9.30 a.m.	5.00 - 6.00 p.m.	8.30 - 9.30 a.m.
Peak Hour No.	18	20	9	9
Average Hourly	10	12	4	5
Ave. Hourly - Morning	5	12	3	6
Ave. Hourly - Afternoon	13	11	6	5

PARKING ACCUMULATION

TIME	NUMBER
7.00	19
7.30	18
8.00	17
8.30	14
9.00	10
9.30	10
10.00	8
4.30	12
5.00	13
5.30	16
6.00	15
6.30	15
7.00	15
7.30	16
8.00	17
8.30	17

Peak Accumulation : 19
Peak Time : 7.00 a.m.
Peak Utilisation : 53%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	30	33
Occupancy	80%	87%
Persons	55	59
% of Accommodation Capacity Occupied	50%	53%

4.4 Motel - Bass Hill

General Description

The site is located on the Hume Highway near the intersection of Miller Road. The properties adjoining the site are occupied by detached residential dwellings. The Highway frontage in this area is mainly occupied by some residential uses and some commercial uses such as car sales and service stations. A large hotel/motel is several hundred metres along the Highway.

Date of Survey: 14.2.79

Time of Survey: 7.00 - 10.00 a.m., 4.30 - 8.30 p.m.

Site Data:

Business	:	Motel without public restaurant
Area of Site	:	3550m^2
Area of Buildings	:	700m^2
Frontage to Main Road	:	39m
Number of Vehicle Entrances	:	1
Accommodation Capacity	:	31
Peak Season	:	No real peak season
Peak Day and Time	:	No patricular day, evening is peak time for arrivals between 5.00 - 10.00 p.m.
Parking Supply	:	16 spaces
Availability of Off-Site Parking	:	High
Employees	:	4
1977 A.A.D.T.	:	44,290

MOTEL - BASS HILL

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	0	7	0	2
7.30 - 8.00	3	2	1	2
8.00 - 8.30	0	0	0	0
8.30 - 9.00	0	4	0	2
9.00 - 9.30	1	0	1	0
9.30 -10.00	1	3	1	2
4.30 - 5.00	2	2	2	1
5.00 - 5.30	4	1	2	1
5.30 - 6.00	2	2	1	1
6.00 - 6.30	3	3	2	3
6.30 - 7.00	2	2	1	1
7.00 - 7.30	0	0	0	0
7.30 - 8.00	8	4	3	2
8.00 - 8.30	2	2	0	0
Peak Hour	7.30 - 8.30 p.m.	7.00 - 8.00 a.m.	4.30 - 5.30 p.m.	7.00-8.00 a.m. 5.30-6.30 p.m. 6.00-7.00 p.m.
Peak Hour No.	10	9	4	4
Average Hourly	4	5	2	2
Ave. Hourly - Morning	2	5	1	3
Ave. Hourly - Afternoon	6	4	3	2

PARKING ACCUMULATION

TIME	NUMBER
7.00	8
7.30	6
8.00	5
8.30	5
9.00	3
9.30	4
10.00	3
4.30	7
5.00	8
5.30	9
6.00	9
6.30	8
7.00	8
7.30	8
8.00	9
8.30	9

Peak Accumulation : 9
Peak Time : 5.30, 6.00, 8.00 and 8.30 p.m.
Peak Utilisation : 56%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	10	12
Occupancy	63%	75%
Persons	16	24
% of Accommodation Capacity Occupied	52%	77%

4.5 Motel - Sylvania

General Site Description

The motel is located on the Princes Highway just south of Tom Ugly's Bridge. Located on the inwards city side of the Highway, the adjacent and surrounding land use is predominantly detached residential dwellings. Across the Highway is the Sylvania Hotel/Motel and the shopping centre which is mainly associated with Port Hacking Road. At the rear of the site is a reception house used for weddings and functions.

Date of Survey: 12.2.79

Time of Survey: 7.00-10.00 a.m., 4.30-8.30 p.m.

Site Data:

Business	:	Motel with reception/function centre at rear*
Area of Site	:	2640m^2
Area of Building	:	550m^2
Frontage to Main Road	:	33m
Number of Vehicle Entrances	:	1 - main road
Number of Motel Units	:	22
Accommodation Capacity	:	46
Peak Season	:	Christmas Period
Peak Day and Time	:	Saturday late afternoon
Parking Supply	:	24 spaces
Availability of Off-Site Parking	:	High
Employees	:	4
1977 A.A.D.T.	:	36,510

MOTEL - SYLVANIA

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	0	0	0	0
7.30 - 8.00	0	1	0	1
8.00 - 8.30	0	0	0	0
8.30 - 9.00	1	2	1	2
9.00 - 9.30	1	3	1	2
9.30 -10.00	0	1	0	0
4.30 - 5.00	2	3	1	1
5.00 - 5.30	4	3	1	0
5.30 - 6.00	2	2	1	0
6.00 - 6.30	2	7	2	2
6.30 - 7.00	0	0	0	0
7.00 - 7.30	5	1	0	0
7.30 - 8.00	3	0	2	0
8.00 - 8.30	0	0	0	0
Peak Hour	7.00 - 8.00 p.m.	5.30 - 6.30 p.m.	5.30 - 6.30 p.m.	8.30 - 9.30 a.m.
Peak Hour No.	8	9	3	4
Average Hourly	3	3	1	1
Ave. Hourly - Morning	1	2	1	2
Ave. Hourly - Afternoon	5	4	2	1

PARKING ACCUMULATION

TIME	NUMBER
7.00	6
7.30	6
8.00	5
8.30	5
9.00	4
9.30	3
10.00	3
4.30	4
5.00	4
5.30	5
6.00	6
6.30	6
7.00	6
7.30	6
8.00	8
8.30	8

Peak Accumulation : 8
Peak Time : 8.00, 8.30 p.m.
Peak Utilisation : 33%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	27	27
Occupancy	100%	100%
Persons	49	54
% of Accommodation Capacity Occupied	65%	72%

4.6 Motel - Beecroft

The motel is located on the eastern side of Pennant Hills Road in Beecroft West. There are three service stations close by. On the other side of the site is a community centre and there is a school behind the site. The area around the site is used for detached housing or is still vacant. There is no competition close by.

Date of Survey: 15. 2.79

Time of Survey: 7.00 - 10.00 a.m., 4.30 - 8.30 p.m.

Site Data:

Business	:	Motel without public restaurant
Area of Site	:	1860m^2
Area of Building	:	800m x 2 storey + 160m^2 of reception = 1760m^2
Frontage to Main Road	:	38m
Number of Vehicle Entrances	:	2
Number of Motel Units	:	27
Accommodation Capacity	:	75
Peak Season	:	No particular season
Peak Day and Times	:	Usually full on 6 nights each week not on Sunday. Departures 7.30-9.30 a.m., peak arrivals 5.00-7.00 p.m.
Parking Supply	:	22 spaces + 1 reserved for manager
Availability of Off-Site Parking	:	High
Employees	:	5
1977 A.A.D.T.	:	27,390

MOTEL - BEECROFT

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	0	1	0	0
7.30 - 8.00	1	4	1	3
8.00 - 8.30	2	9	2	5
8.30 - 9.00	5	14	3	6
9.00 - 9.30	7	2	2	1
9.30 -10.00	4	6	4	4
4.30 - 5.00	5	3	3	1
5.00 - 5.30	10	7	4	4
5.30 - 6.00	12	10	8	3
6.00 - 6.30	4	7	2	3
6.30 - 7.00	4	7	3	4
7.00 - 7.30	2	7	1	4
7.30 - 8.00	18	14	11	6
8.00 - 8.30	12	7	7	4
Peak Hour	7.30 - 8.30 p.m.	8.00 - 9.00 a.m.	7.30 - 8.30 p.m.	8.00 - 9.00 a.m.
Peak Hour No.	30	23	18	11
Average Hourly	11	14	7	7
Ave. Hourly - Morning	6	12	4	6
Ave. Hourly - Afternoon	17	16	10	7

PARKING ACCUMULATION

TIME	NUMBER
7.00	18
7.30	18
8.00	16
8.30	13
9.00	10
9.30	11
10.00	11
4.30	9
5.00	11
5.30	11
6.00	16
6.30	15
7.00	14
7.30	11
8.00	16
8.30	19

Peak Accumulation : 19
Peak Time : 8.30 p.m.
Peak Utilisation : 87%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	27	27
Occupancy	100%	100%
Persons	49	54
% of Accommodation Capacity Occupied	65%	72%

4.7 Motel - West Ryde

General Site Description

The motel is located on Victoria Road near its intersection with Bowden Street. Adjacent to the site there are detached dwellings and three small local type stores. The land use in the immediate area is mostly residential, further away are the large industrial areas, Rhodes and Silverwater. The traffic on Victoria Road is heavy whilst Bowden Street is a fairly quiet residential street.

Date of Survey: 12.2.79

Time of Survey: 7.00 - 10.00 a.m., 4.30 - 8.30 p.m.

Site Data:

Business	:	Motel with public restaurant
Area of Site	:	4030m^2
Area of Building	:	1170m^2
Frontage to Main Road	:	63m
Number of Vehicle Entrances	:	1
Number of Units	:	41
Accommodation Capacity	:	125
Peak Season	:	No particular peak, quieter during summer holidays
Peak Day and Time	:	No special day or time
Parking Supply	:	70 spaces
Availabilit of Off-Site Parking	:	High
Employees	:	8
1977 A.A.D.T.	:	48,800

MOTEL - RYDE

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	0	0	0	0
7.30 - 8.00	4	6	1	2
8.00 - 8.30	3	7	1	7
8.30 - 9.00	3	6	0	4
9.00 - 9.30	3	7	2	4
9.30 -10.00	0	7	0	3
4.30 - 5.00	9	4	4	2
5.00 - 5.30	9	4	5	2
5.30 - 6.00	7	2	4	0
6.00 - 6.30	6	4	2	3
6.30 - 7.00	4	1	3	1
7.00 - 7.30	12	7	7	5
7.30 - 8.00	6	5	3	3
8.00 - 8.30	9	4	3	0
Peak Hour	4.30-5.30 p.m. 7.00-8.00 p.m.	9.00 - 10.00 a.m.	6.30-7.30 p.m. 7.00-8.00 p.m.	8.00-8.30 a.m.
Peak Hour No.	18	14	10	11
Average Hourly	11	9	5	5
Ave. Hourly - Morning	4	11	1	7
Ave. Hourly - Afternoon	16	8	8	4

PARKING ACCUMULATION

TIME	NUMBER
7.00	20
7.30	20
8.00	19
8.30	13
9.00	9
9.30	7
10.00	4
4.30	8
5.00	10
5.30	13
6.00	17
6.30	16
7.00	18
7.30	20
8.00	20
8.30	23

Peak Accumulation : 23
Peak Time : 8.30 p.m.
Peak Utilisation : 33%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	27	37
Occupancy	66%	90%
Persons	53	62
% of Accommodation Capacity Occupied	42%	50%

4.8 Motel - Parramatta

General Site Description

The motel is located in Church Street near Rosehill Street, Parramatta. The land use in front of, behind and adjacent to the site is motor vehicle related. Mostly car display areas with a servicing area and repair centre close by. The site is in the middle of the famous "Auto Alley". This whole section of Church Street is devoted to car sales. On the southern side of Church Street off the Highway, the predominant land use is residential, mainly single unit dwellings.

Date of Survey: 13.2.79

Time of Survey: 7.00-10.00 a.m., 4.30-8.30 p.m.

Site Data:

Business	:	Motel
Area of Site	:	830m^2
Area of Buildings	:	580m^2
Frontage to Main Road	:	18m
Number of Vehicle Entrances	:	1
Exits	:	1
Number of Units	:	18
Accommodation Capacity	:	48
Peak Season	:	Christmas to Easter
Peak Time and Day	:	No particular day, usually busiest 4.00-10.00 p.m.
Parking Supply	:	13 spaces
Availability of Off-Site Parking	:	Low
Employees	:	2
1977 A.A.D.T.	:	50,490

MOTEL - PARRAMATTA

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	0	1	0	1
7.30 - 8.00	6	3	2	1
8.00 - 8.30	1	10	0	2
8.30 - 9.00	5	14	4	3
9.00 - 9.30	4	8	0	4
9.30 -10.00	2	2	1	1
4.30 - 5.00	2	0	1	0
5.00 - 5.30	4	5	2	2
5.30 - 6.00	3	4	1	3
6.00 - 6.30	2	2	1	0
6.30 - 7.00	6	10	3	3
7.00 - 7.30	4	3	1	1
7.30 - 8.00	3	0	1	0
8.00 - 8.30	4	9	1	4
Peak Hour	6.30 - 7.30 p.m.	8.00 - 9.00 a.m.	8.00-9.00 a.m. 8.30-9.30 a.m. 6.00-7.00 p.m., 6.30-7.30 p.m.	8.30-9.30 a.m.
Peak Hour No.	10	24	4	7
Average Hourly	7	10	3	4
Ave. Hourly - Morning	6	13	2	4
Ave. Hourly - Afternoon	9	8	3	3

PARKING ACCUMULATION

TIME	NUMBER
7.00	11
7.30	10
8.00	11
8.30	9
9.00	10
9.30	6
10.00	6
4.30	9
5.00	10
5.30	10
6.00	8
6.30	9
7.00	9
7.30	9
8.00	10
8.30	7

Peak Accumulation : 11
Peak Time : 7.00 a.m., 8.00 a.m.
Peak Utilisation : 85%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	16	15
Occupancy	89%	83%
Persons	21	22
% of Accommidation Capacity Occupied	44%	46%

4.9 Motel - Artarmon

General Site Description

The motel is located on the western side of the Pacific Highway in Artarmon. Adjacent to and behind the site are 3 storey flats; opposite the site there are detached houses. The land use in the general area behind the site is residential flat development. Along the Highway there is a mixture of residential flats, single unit dwellings and commercial buildings including a furniture warehouse, tyre retail outlet and a television aerial repair centre. The motel has a public restaurant which seats 65 people and a function room which can handle receptions for a maximum of 80 people. A large number of the people that stay at the motel are interstate businessmen who fly to Sydney. There are two other motels within 1 km of the site.

Date of Survey: 12.2.79

Time of Survey: 7.00-10.00 a.m., 4.30-8.30 p.m.

Site Data:

Business	:	Motel with public restaurant
Site Area	:	3050m^2
Building Area	:	3400m^2
Frontage to Main Road	:	61m
Number of Vehicle Entrances	:	2
Exits	:	1
Number of Units	:	64
Accommodation Capacity	:	128
Peak Season	:	February
Peak Time	:	Evenings 5.00 - 10.00 p.m.
Parking Supply	:	55
Availability of Off-Site Parking	:	High
Employees	:	18
1977 A.A.D.T.	:	31,080

MOTEL - ARTARMON

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	2	9	1	3
7.30 - 8.00	6	13	3	3
8.00 - 8.30	17	23	11	13
8.30 - 9.00	12	18	10	6
9.00 - 9.30	13	10	8	5
9.30 -10.00	13	11	9	6
4.30 - 5.00	9	12	6	8
5.00 - 5.30	13	12	8	8
5.30 - 6.00	22	30	12	18
6.00 - 6.30	33	12	13	8
6.30 - 7.00	13	9	8	6
7.00 - 7.30	25	13	16	8
7.30 - 8.00	16	20	8	9
8.00 - 8.30	15	16	7	10
Peak Hour	5.30 - 6.30 p.m.	5.30 - 6.30 p.m.	5.30 - 6.30 p.m.	5.30 - 6.30 p.m.
Peak Number	55	42	25	26
Average Hourly	30	30	17	16
Ave. Hourly - Morning	21	28	14	12
Ave. Hourly - Afternoon	49	31	20	19

PARKING ACCUMULATION

TIME	NUMBER
7.00	26
7.30	24
8.00	24
8.30	22
9.00	26
9.30	29
10.00	32
4.30	46
5.00	44
5.30	44
6.00	38
6.30	43
7.00	45
7.30	53
8.00	52
8.30	49

Peak Accumulation : 53
Peak Time : 7.30 p.m.
Peak Utilisation : 96%

Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	53	51
Occupancy	83%	80%
Persons	100	72
% of Accommodation Capacity Occupied	78%	56%

4.10 Motel - Kensington

General Site Description

The motel is located on Alison Road between Randwick Racecourse and Anzac Parade at Kensington. The outstanding feature of the motel is its proximity to the Racecourse, Centennial Park, the Showground/Cricket Ground complex and the Kensington and Moore Park Golf Courses. Thus the motel receives substantial trade from the activities generated by these places. Holidays, long week-ends and particularly Easter are the heaviest periods for bookings. The site adjoins residential properties on one side and has a lodge/home unit complex on the other side for long term residents. Another larger motel occupies a site on the corner of Doncaster Avenue and Alison Road.

Date of Survey: 15.2.79

Time of Survey: 7.00-10.00 a.m., 4.30-8.30 p.m.

Site Data:

Business	:	Motel without public restaurant
Area of Site	:	600m^2
Area of Building	:	890m^2
Frontage to Main Road	:	15.5m
Number of Vehicle Entrances	:	1 - main road
Exits	:	1 - rear lane
Number of Motel Units	:	24
Accommodation Capacity	:	57
Peak Season	:	Easter and Janauary
Peak Day and Time	:	No particular day except that Sunday is quiet. The peak time for departures is between 6.00 - 10.00 a.m.
Parking Supply	:	24 spaces
Availability of Off-Site Parking	:	Medium
Employees	:	9
1977 A.A.D.T.	:	34,010

MOTEL - KENSINGTON

TRIP GENERATION

	PEOPLE		CARS	
	IN	OUT	IN	OUT
7.00 - 7.30	3	3	1	1
7.30 - 8.00	9	14	3	5
8.00 - 8.30	3	11	2	4
8.30 - 9.00	2	2	3	1
9.00 - 9.30	8	6	2	3
9.30 -10.00	10	18	7	8
4.30 - 5.00	11	3	3	1
5.00 - 5.30	0	10	1	3
5.30 - 6.00	10	7	2	1
6.00 - 6.30	3	8	1	2
6.30 - 7.00	5	4	0	0
7.00 - 7.30	6	0	2	1
7.30 - 8.00	8	6	3	0
8.00 - 8.30	7	2	1	1
Peak Hour	9.00 - 10.00 a.m.	7.30 - 8.30 a.m.	9.00 - 10.00 a.m.	9.00 - 10.00 a.m.
Peak Hour No.	18	25	9	11
Average Hourly	12	13	4	4
Ave. Hourly - Morning	12	18	6	7
Ave. Hourly - Afternoon	13	10	3	2

PARKING ACCUMULATION

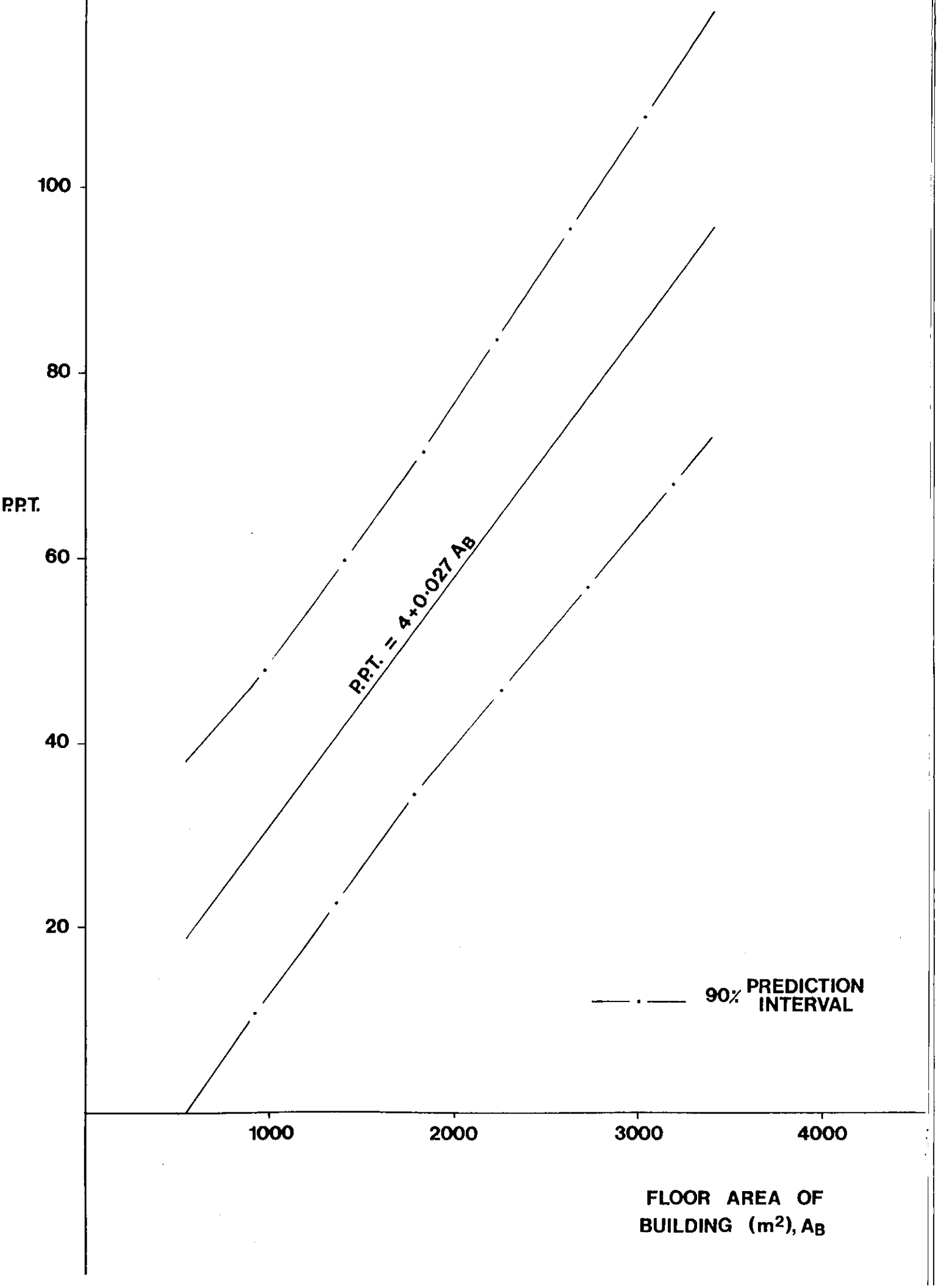
TIME	NUMBER
7.00	12
7.30	12
8.00	10
8.30	8
9.00	10
9.30	9
10.00	8
4.30	6
5.00	8
5.30	6
6.00	7
6.30	6
7.00	6
7.30	7
8.00	10
8.30	10

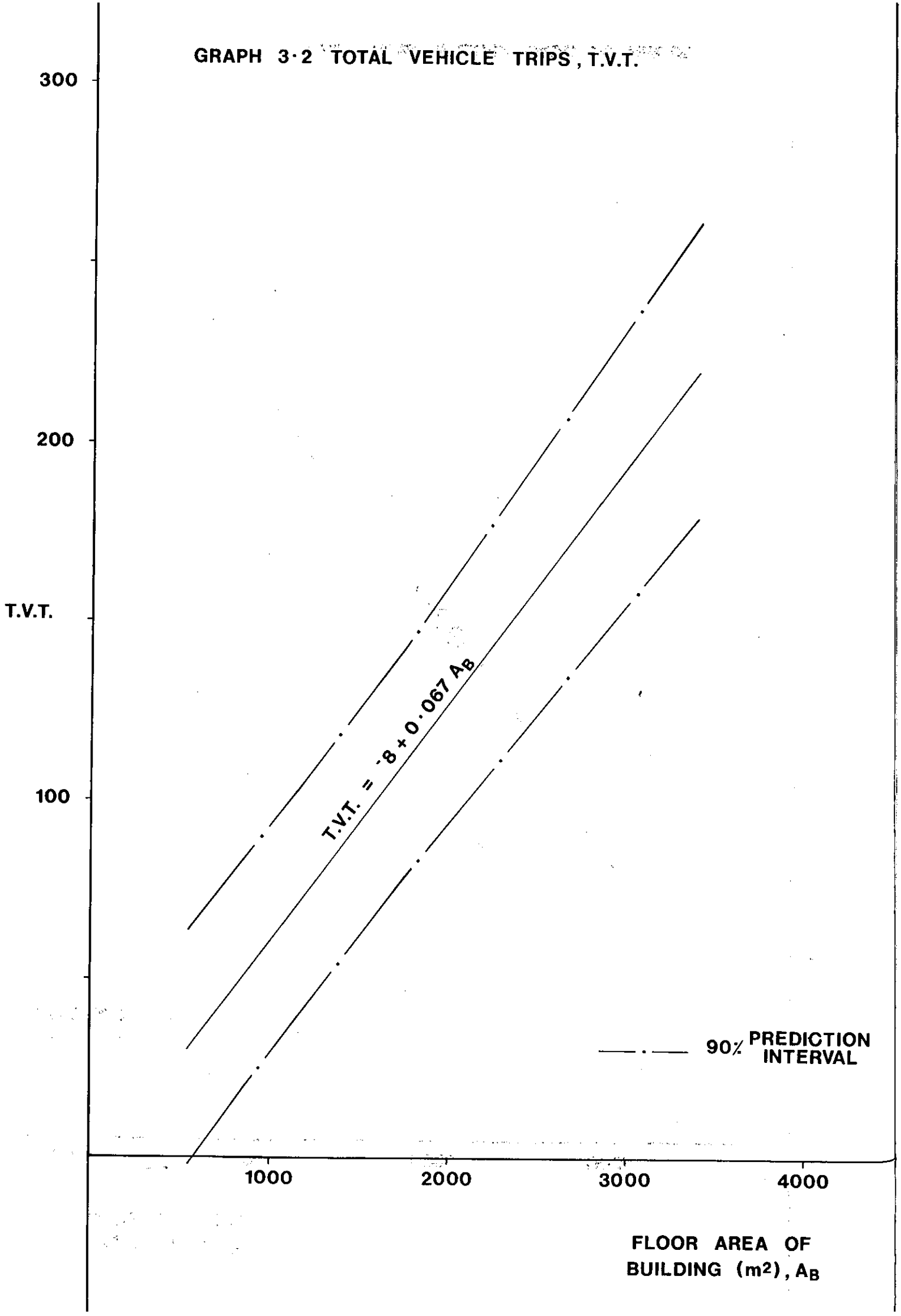
Peak Accumulation : 12
Peak Time : 7.00 a.m., 7.30 a.m.
Peak Utilisation : 50%

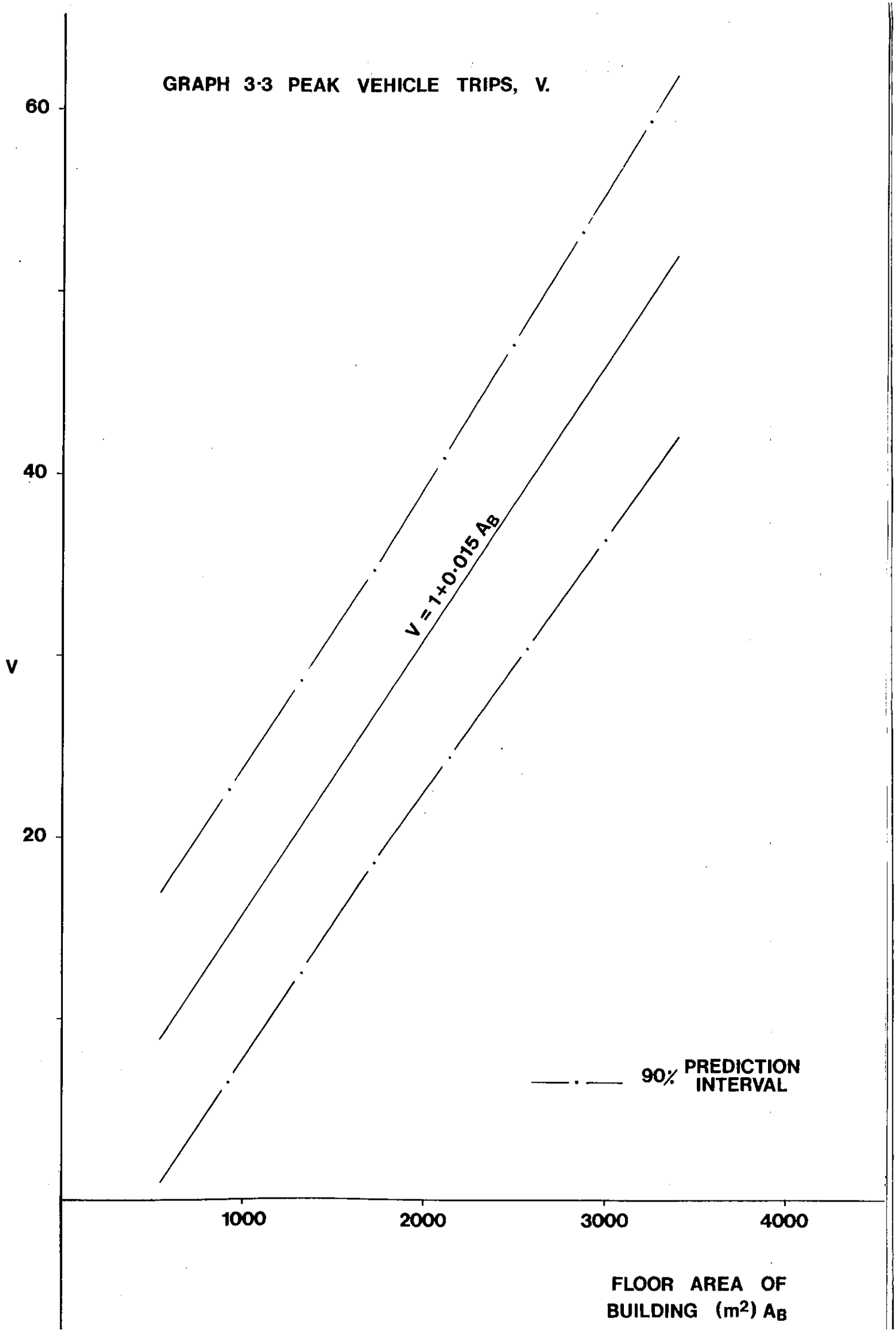
Occupancy

	NIGHT PRIOR TO SURVEY	NIGHT OF SURVEY
Units Occupied	22	21
Occupancy	92%	88%
Persons	42	41
% of Accommodation Capacity Occupied	74%	72%

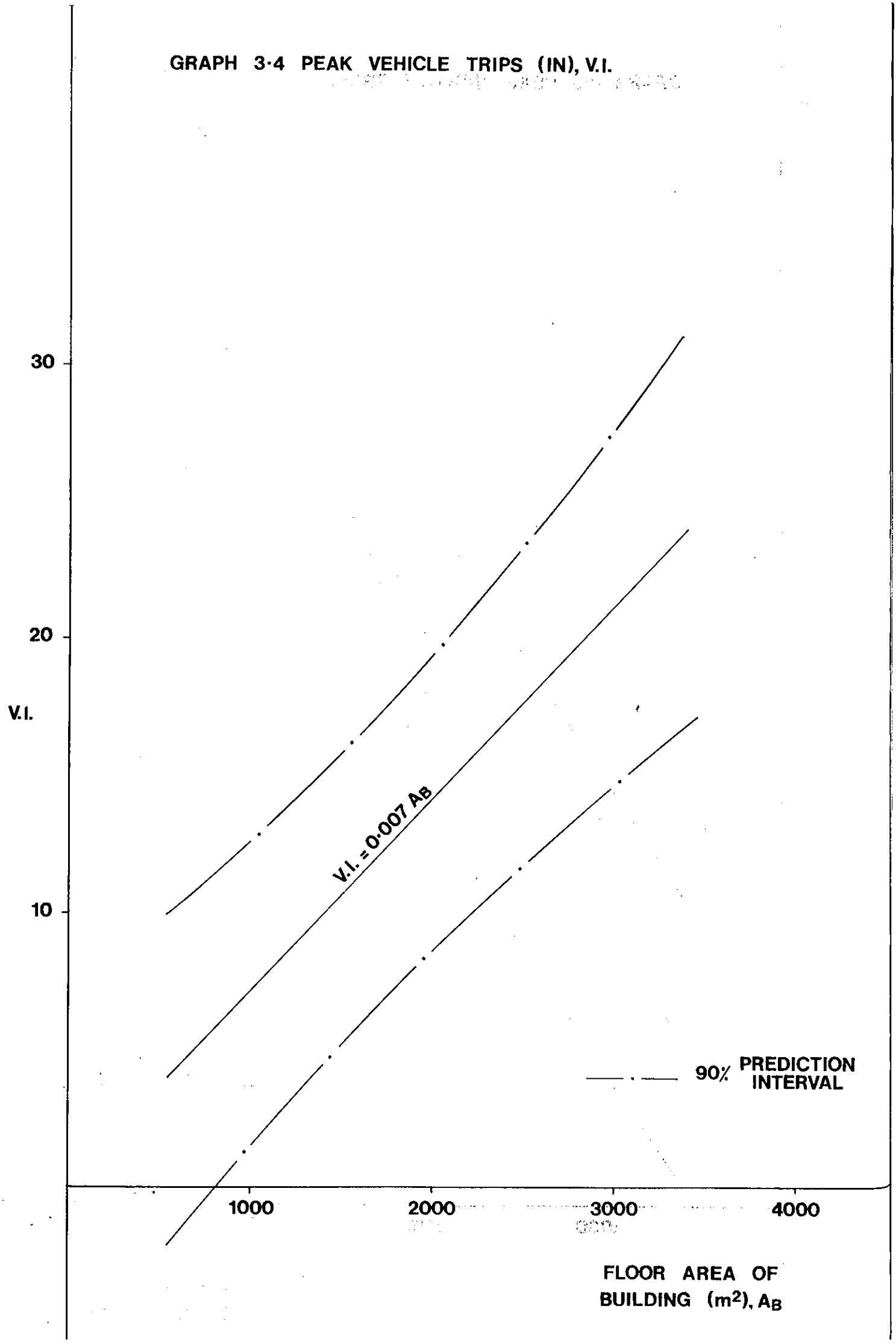
GRAPH 3·1 PEAK PERSON TRIPS, P.P.T.



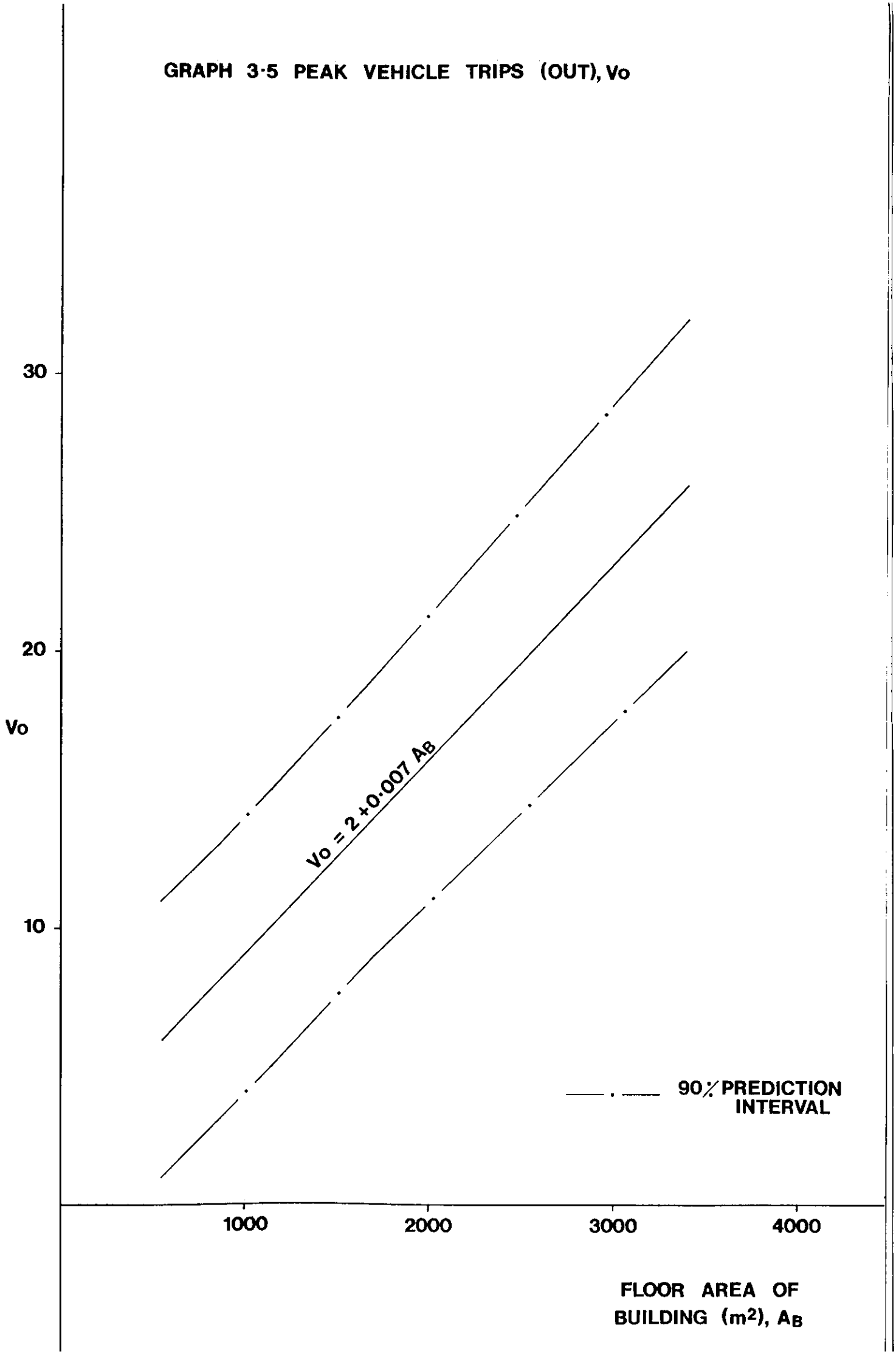

GRAPH 3·2 TOTAL VEHICLE TRIPS, T.V.T.
300
200
100
T.V.T.
T.V.T. = -8 + 0.067 A_B
90% PREDICTION INTERVAL
1000
2000
3000
4000
FLOOR AREA OF BUILDING (m^2), A_B


GRAPH 3·3 PEAK VEHICLE TRIPS, V.
60
40
20
V
V = 1+0·015 AB
90% PREDICTION INTERVAL
1000
2000
3000
4000
FLOOR AREA OF BUILDING (m2) AB

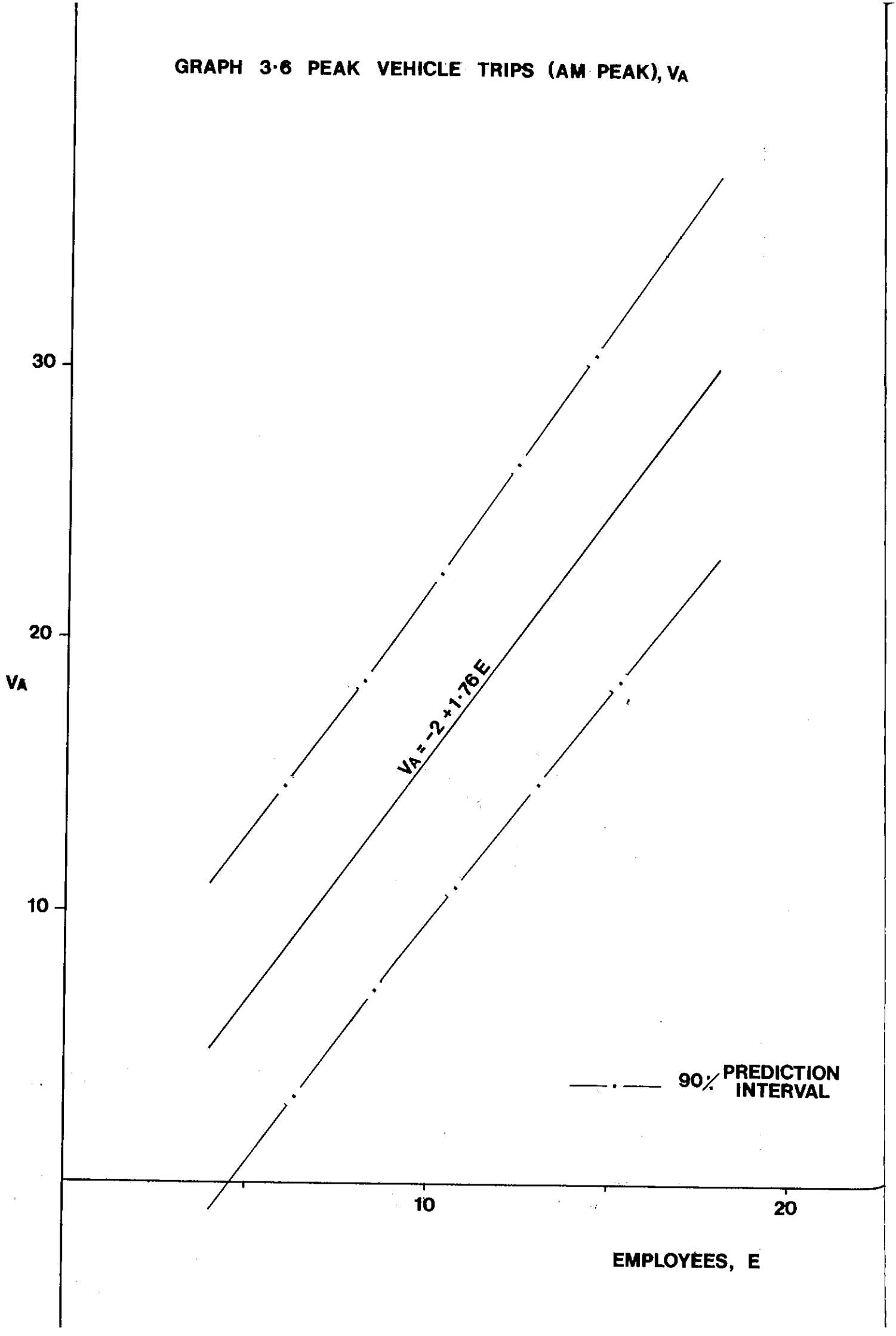
GRAPH 3·4 PEAK VEHICLE TRIPS (IN), V.I.



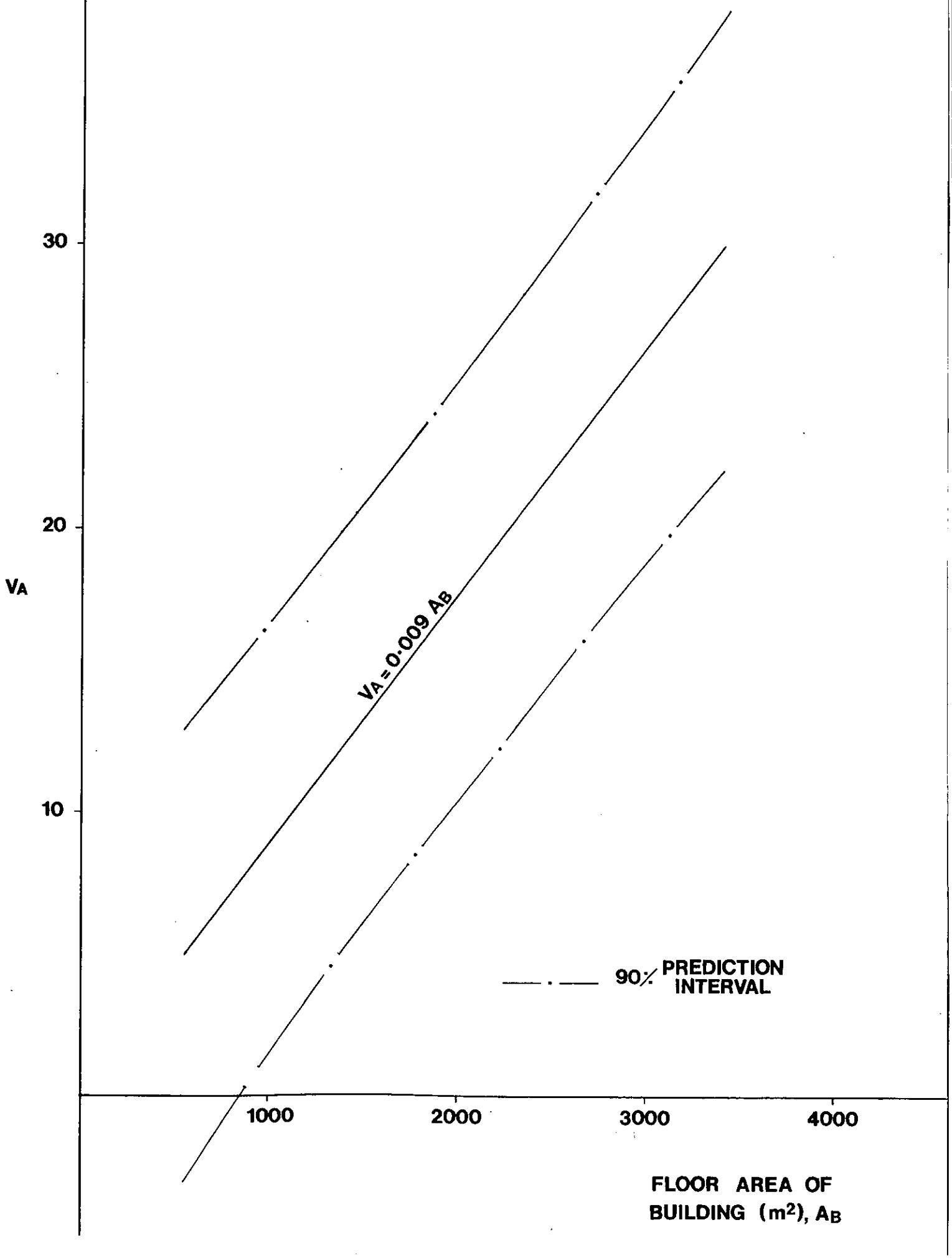
GRAPH 3·5 PEAK VEHICLE TRIPS (OUT), Vo



GRAPH 3·6 PEAK VEHICLE TRIPS (AM PEAK), V_A



GRAPH 3·7 PEAK VEHICLE TRIPS (AM PEAK), V_A



GRAPH 3·8 PEAK VEHICLE TRIPS (PM PEAK), V_P