IHE IMPACI OF RISING FUEL PRICES ON WEEKEND RECREATION TRIPS IN URBAN NEW SOUTH WALES

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.BSTRACT:

Approximately 750 households in Sydney, Newcastle and Wollongong were surveyed to ascertain the effects of fuel price rises on their weekend recreation behaviour and the impact of possible future price rises. Attitudes to the 'energy crisis' and government policy are also reported.

Generally the impact of fuel price rises on weekend recreation travel over the past two years has been minor though there have been more notable effects in Wollongong and Newcastle than in Sydney The major impact in all cities has been to reduce the frequency of such trips. If the price of fuel was to double by the end of 1982 then the tendency to make fewer trips will increase as will the likelihood of choosing a recreation destination closer to home.

INIRODUCTION

At the 1980 A.T.R.F. two of the authors presented a paper on the effects of recent fuel price rises on household behaviour in Sydney. Subsequently, a similar study was undertaken in rural New South Wales(1) Both studies identified that for those who had been affected by such fuel price rises it was the number of discretionary trips such as weekend recreation trips that had been reduced In addition, such trips were considered especially vulnerable to future fuel price rises. Both studies also concluded that the effects of fuel price rises was by no means uniform either by location of the household or by socioeconomic characteristics of the household. The aim of the present study is to be more definitive about the impacts of fuel price rises on one particular type of household discretionary trip, the weekend recreation trip This particular trip was isolated for study after consultation with the New South Wales Department of Tourism. It is a trip that is usually recalled with some accuracy by households - a point which contributes significantly to the general acceptance of the survey findings. It is also a trip which makes a considerable contribution to the economic well-being of the providers of recreational facilities throughout the State. Thus knowledge of its vulnerability to rising fuel prices is of economical and social significance. Finally, the study attempted to gain some insight of the level of knowledge and perception of the so called "fuel crisis" in Australia. Such data were seen as being interesting in their own right as well as offering some understanding for household's recreational patterns.

Literature on the impact of rising fuel prices on recreational travel has generally emanated from the United States. For example, Willenborg and Pitts (1977) investigated the effectiveness of the price mechanism in reducing gasoline consumption not only for recreational travel but for all forms of trip-making. The major findings of the study were that the price mechanism was relatively ineffective in reducing consumption of petrol when prices increased gradually over time. Fuel shortages appear to have had more general effects on recreational travel than rising fuel price. This point is supported by Sacco and Hajj who assessed the impact of the energy shortage in 1973-4 on travel attitudes and travel patterns of an automobile-oriented, middle-class suburban area in America. Shortage of fuel was found to reduce traffic volumes significantly on weekends. In other words, social recreational trips

^{1. &#}x27;The Effect of Rising Fuel Prices on Household Behaviour in Rural New South Wales', a report prepared by Dr. A.J. Holsman and Mr. N.G. Lonergan for the N.S.W. Department of Tourism.

were limited when there was a need to conserve fuel. Kamp et al (1979) interviewed holiday-makers at Orange, Taxas to ascertain their reactions to energy shortages and rising fuel prices. Their results indicated a willingness of holiday-makers to switch their vehicles from large cars or campervans to smaller more economical cars in the hope of maintaining the number of trips made.

Ihe lack of Australian literature in the study area could be taken as a sign of confidence in the future by the recreation industry in this country. other words perhaps there is little work because there is little concern. The only studies known to the authors are those of the authors mentioned earlier and that by Kerby (1981). Studies undertaken in Sydney and the Hunter Valley by the authors in mid 1980 indicated that 26 percent and 27 percent of those interviewed in the two respective areas noted a change in their social and recreation trips compared with a year earlier when fuel prices were substantially lower. Approximately two-thirds of those registering a change in recreation behaviour recorded a decline in the number of such trips undertaken The rising price of fuel was given as the main reason for changed social and recreational trips by 70 percent of those affected in the country and by 47 percent in the city. Whilst these studies and that of Kerby provide general behavioural responses they do not make available specific data on recreational travel patterns and the changes that have occurred as the result of rising fuel prices on such trip making.

MEIHODOLOGY

The basic aim of this study is to establish attitudes to recent fuel price rises and their impacts on weekend recreational behaviour in urban New South Wales, and to identify how these attitudes and effects vary between Sydney, Wollongong and Newcastle second part of the study is to ascertain how attitudes and behavioural patterns may change in the future if the price of petrol was to rise to 75¢ litre by the end of 1982 (i.e. approximate doubling of existing prices). The third aim of the study was to discover attitudes and perceptions towards the energy/fuel situation in Australia. To investigate these aims a questionnaire was constructed and administered to 749 households in urban New South Wales in April 1981. Of the total sample 415 were undertaken in Newcastle, 158 in Wollongong and 176 in Sydney. The variations in sample sizes can be accounted for by variations in class sizes of those courses in the School of Geography at the University of New South Wales that were willing to participate in the study. The distribution of survey respondents is not totally random. In Sydney the surveys were undertaken in the twelve residential suburbs of the students involved. In Newcastle, the three suburbs of Warners Bay, Islington and Merewether were sampled and in Wollongong a random

sample of Saturday shoppers in the C.B.D. was undertaken. Despite these unavoidable problems a reasonable cross-section of households were surveyed. Head of households were interviewed wherever possible. The selection of households within the areas concerned was entirely random.

The questionnaire used in all three areas sought household characteristics which could be cross-tabulated with actual and perceived effects. Information on recent weekend travel behaviour patterns were sought as well as reasons for changes in such patterns in the past two years (if any) Households were then asked how willing they would be to travel for weekend recreation at prices of 36¢ litre, 50¢ litre, 75¢ litre and \$1.00 litre, and then asked for specific attitudes to a range of possible changes in recreation behaviour given a price of 75¢ litre. Finally, seven questions were asked that aimed to discover household attitudes and perceptions towards the energy/fuel situation in Australia, The information collected represents a considerable data source, the analysis of which is continuing. Therefore, the present paper should be seen as extracting some of the more interesting findings. Simple descriptive statistics have been used to analyse the data. Chi square and analysis of various tests have not been applied because much of the data are too coarse, sample sizes vary and sub-group observations are frequently insufficient in number. A weekend trip is one that involves one, two or three nights stay away from home.

RESULTS

The findings of the study can be discussed under three broad headings: (i) existing recreational patterns and how and why such patterns have changed since April 1980 (ii) the impact of possible fuel price rises in the future (iii) attitudes to and perceptions of the energy/fuel situation and issue in Australia.²

EXISTING RECREATIONAL PATTERNS

The first set of tables give some broad indications of weekend travel of households in the three cities. Table 1 records responses to a question on the date of the last weekend recreational trip. The high percentage responding to having made a trip in the past month can be explained by the Easter holiday period, for it can be seen that in April a third of Sydney and Newcastle households and close to a half of Wollongong households made a weekend recreational trip. Approximately two-thirds of all households had been away on a weekend trip in the preceding six months. The highest response of non-trip making in the past year was recorded for Sydney households, a reflection perhaps of a greater variety of recreation outlets within Sydney itself or the increased difficulty of getting out and into Sydney notably at weekends.

² Because of space limitations, not all tables have been produced. These are available from the authors on request.

As would be expected the location of the most recent trip undertaken by households differed for the three towns (see Table 2). The pattern of weekend recreational trips is most varied for Sydney. The four areas scoring more than 10 percent of responses are the South Coast, the Central Coast, Western N.S.W. and Sydney itself. The South Coast registers the and Sydney itself The South Coast registers the highest response The pattern of Newcastle residents trip-making is dominated by visits to Sydney. Apart from visits to Sydney the tendency of Newcastle residents' recreational travel is more northwards to either the near or far north coast. Newcastle residents undertook more interstate travel than their Sydney counterparts. However, the most uniform pattern of weekend recreational movement was registered by households in Wollongong. Over 40 percent of their recreational movement was to south coast resorts, a fact easily explained by the ease of access of the area to Wollongong residents. Sydney was the only other N.S.W. destination to be registered significantly by Wollongong residents. Wollongong households also travelled more interstate than the respondents in the other two survey areas.

The pattern of travel summarised in Table 2 is reflected in the type of accommodation used on the most recent weekend recreation trip (given in Table 3). For example, Newcastle and Wollongong travellers register a higher level of staying with relatives, a point which probably can be explained by the high percentage of Newcastle and Wollongong households visiting family in Sydney households tend to stay mostly in hotels or motels and are more likely to rent houses or stay with friends Newcastle scores highest for those staying in an overnight van (10.6 percent), their own house (10.1 percent) and with relatives (22.5 percent). Wollongong residents appear more likely to holiday in their own caravan (12.0 percent) or to go camping (12.0 percent). A further point of interest here is that about 10 percent of the total sample go away to their own second (or third) home. This percentage is significant when considering the likely effects of future fuel price rises, for it is unlikely that given the financial investment or commitment involved in owning a second home that such households would remedy their travel behaviour.

Table 4 indicates that of the three samples Wollongong households are most likely to make the greatest number of weekend trips per year. Nearly one-third of the Wollongong sample undertake more than six weekend recreation trips per year. The correspond percentages for Sydney and Newcastle are 20 percent and 16 percent respectively. The high frequency of weekend trip-making by Wollongong households may again be explained by their ease of access to south coast resorts and by the low cost of camping, or caravan park based weekends in which many Wollongong households appear to

TABLE 1
HOW RECENT WAS YOUR LAST WEEKEND RECREATION TRIP

	%	%	WOLLONGONG
	SYDNEY	NEWCASTLE	%
Last Month Last 6 Months Last 12 Months Greater than 12 Months	33.2	33.3	44.3
	31.6	31.6	26.6
	8.0	11.1	6.3
	27.4	23.9	22.8

TABLE 2

LOCATION OF MOST RECENT WEEKEND RECREATION TRIP

DESTINATION	SYDNEY	% NEWCASILE	% WOLLONGONG
Lake Macquarie Sydney Hunter Valley Pt. Stephens Near N. Coast Far N. Coast N. Tablelands S. Coast Central Coast Western N.S.W. Snowy South N.S.W. Newcastle Wollongong Interstate Other	4.5 11.4 1.1 0.6 9.1 3.4 2.3 13.6 10.2 11.4 4.5 8.0 4.0 6.8 5.1	23 263 56 46 147 129 71 53 71 25 05 00 00 9.4	0.0 17.3 4.0 0.0 0.0 4.0 0.0 41.3 1.3 8.0 5.3 2.7 1.3 0.0
	2+1	1.0	0.0

TABLE 3

TYPE OF ACCOMMODATION USED ON MOST RECENT WEEKEND RECREATION TRIP

TYPE OF ACCOMMODATION	%	%	%
	SYDNEY	NEWCASTLE	WOLLONGONG
Hotel/Motel Overnight Van Own Caravan Rented House Own House Relatives Friends Camping Other	36.4	28.0	267
	4.0	10.6	9.3
	4.0	5.3	12.0
	12.1	8.8	67
	8.7	10.1	9.3
	15.0	22.5	187
	13.3	7.3	53
	2.9	5.6	12.0
	3.5	1.8	00

indulge. Newcastle residents seem to travel away least. The range of recreational pursuits available within an hour's drive of central Newcastle may account for this lower propensity to travel away at weekends for recreational purposes e.g. the Lower Hunter, Port Stephens and Central Coast areas.

When all weekend trip-making is included there are marginal changes in the patterns of recreational travel from the three centres (see Table 5). In the case of Sydney only two destinations now record more than 10 percent of all travel, namely the south coast and the near north coast. The diffuse pattern of weekend recreation travel from Sydney is well evidenced by the healthy proportions of movement to the central coast, southern N.S.W., western N.S.W. and the Snowy. The Newcastle pattern remains dominated by Sydney and the near and far north coast. The central coast increases in popularity whilst interstate travel declines. For Wollongong residents the south coast assumes even more significance as a weekend holiday destination for exactly one half of those interviewed gave this area as that most frequently visited. Sydney is the only other destination of any importance for Wollongong residents on a regular basis.

Table 6 records the usual form of transport used to reach the destinations summarised in Table 5. The high percentage of car use for weekend trip-making in all three cases is as expected in a society that is highly car-dependent However, there are minor variations in the proportions of travel undertaken by the various modal forms in the three centres. Sydney attains the highest percentage of air travel (6.9 percent). This again is not unexpected because of the numerous air routes leaving for intrastate destinations from Sydney Conversely, because of limited destinations or routes from Sydney, coach travel scores poorly Newcastle registered the highest percentage of rail travel (11 2 percent) can be explained by the large number of Newcastle This residents travelling to Sydney by rail This service whilst unreliable is regular and is provided at a very reasonable cost, frequency and standard. Wollongong scores poorly for both bus and air travel The latter response (2.7 percent) is hardly surprising as there is no established commercial airport at Wollongong Similarly the use of rail for weekend travel to the most popular destinations (the south coast) is limited by the railway terminating at Nowra (Bomaderry) and by poor frequency. These percentages of modal travel are significant in the overall context of the study since they give an indication of the vulnerability of weekend recreational travel to higher fuel prices. In this regard the exceptionally high dependence on the car can be considered with some misgivings. Also it indicates the susceptibility of certain recreational areas that can only be reached by

TABLE 4

FREQUENCY OF WEEKEND TRIPS PER YEAR

NUMBER OF TRIPS MADE	% SYDNEY	% NEWCASILE	WOLLONGONG
1	17.2	261	6 4
2	238	187	277
3	22.1	15.1	8.5
4	10.7	9.0	10.4
5	5.7	5 0	106
6	3 3	9 ., 4	10.6
7 - 12	14.7	11 1	254
More than 12	5.7	5 2	6 3

TABLE 5

$\frac{\texttt{MOST FREQUENT LOCATION OF WEEKEND RECREATION TRIPS IN}}{\texttt{PAST TWELVE MONTHS}}$

DESIINATION	% SYDNEY	% NEWCASTLE	% WOLLONGONG
Lake Macquarie	1.6	7 2	0 0
Sydney	7 3	24.3	224
Hunter Valley	00	59	6 9
Pt. Stephens	1.6	36	0 0
Near N. Coast	113	18.4	1.7
Far N. Coast	5 6	10.5	0.0
N. Tablelands	0 8	5 6	0 0
S. Coast	13.7	4.9	500
Central Coast	9 7	9., 5	1 7
Western N.S.W.	89	2 3	5.2
Snowy	8 1	00	17
South N.S.W.	7 3	0 7	34
Newcastle	3.2	00	0 0
Wollongong	48	0 0	0.0
Blue Mountains	2 4	03	0.0
Interstate	48	4 ., 6	5 ., 2
Other	8 8	2 0	0 0

TABLE 6

HOW DO YOU NORMALLY IRAVEL TO YOUR DESTINATION (MAJOR MODE)

MODE	\$	%	%
	SYDNEY	NEWCASTLE	WOLLONGONG
Car/Van	85.5	79.4	88.0
Rail	4.1	11.2	5.3
Bus	1.4	4.8	1.3
Plane	6 9	4.3	2.7
Other	2 1	0.3	2.7

The first indication of the effect of fuel price rises was gained by asking if the means of travelling to the most frequented destination had changed in the previous twelve months. The results of this exercise are shown in Table 7. Overall only a small percentage of respondents had changed their travel modes. In Newcastle and Wollongong the nature of modal change was from the domestic car to the use of public transport. In Sydney the highest response was a movement from the use of public transport to the private car! In Newcastle and Wollongong the major reason given for modal change was that public transport was cheaper. However, given the very low percentages of the samples in each town who gave the increased costs of motoring as a reason for changing the mode of transport it must be concluded that the rising price of fuel has had little effect on the means of undertaking the weekend trip. One probable reason for this conclusion is the comparatively minor increase in fuel prices noted from mid 1980 to April 1981. general thrust of this conclusion is borne out by examining reasons why households changed their cars over the same period. Although 32 percent of the Sydney sample had changed their car only 4.5 percent gave the rising price of fuel as the reason for changing. In Newcastle the corresponding percentages were 20 percent and 6.3 percent. Indeed, in both cities the greatest tendency was to purchase a new car of the same size and model as previously owned. Only in Wollongong were respondents moving from larger to smaller cars. Eight percent of the total Wollongong sample gave fuel price rises as the reason for changing the family vehicle. The variation in responses noted in Wollongong may be explained by the generally lower per capita disposable incomes of the residents in that city

THE EFFECT OF PETROL PRICE RISES ON WEEKEND RECREATION TRIPS IN THE PAST TWO YEARS

As petrol price rises have been more substantial in real terms in the period since early 1979 it was decided to extend the period of analysis when investigating directly the impact of rising fuel prices on recreation travel. Table 8 shows the nature of the impact varies considerably between the three centres. Whereas in Sydney only 11.6 percent registered no impact of fuel price rises on recreational travel, in Newcastle this figure rose to nearly 22 percent and in Wollongong the figure was more than 37 percent. The lower response for Sydney can probably be explained by the higher socioeconomic status of the survey group. Those that had been affected in general did not cut out weekend recreational travel completely. In all three centres the major response to higher fuel prices has been to reduce the frequency of weekend recreation movement. In the case of Wollongong residents this probably implies fewer movements to south coast resorts. A less significant

Very unwilling Unwilling Undecided Willing Very willing	9.1 12.7 15.2 49.7 13.3	10.9 15.0 19.8 40.4 14.0	Wollongong 5.5 6.8 28.8 52.1 6.8	21.2 20.6 26.7 26.7 4.8	Newcastle 24.1 23.9 24.6 20.1 7.4	Wollongong 18.6 34.3 35.7 10.1	30.3 22.4 30.2 12.1 4.8	\$1.00/lit Newcastle 42.4 19.0 18.3 13.7 6.6	wollongong 44.6 25.7 23.0 5.4 1.4
Very unwilling	Sydney		e Wollongong		75¢/litme	ICE OF FUEL Wollongong		\$1.00/11+	re Wollonger

TABLE 11

LIKELIHOOD OF RESPONSE TO 75¢ LITRE PETROL BY END OF 1982

				1302	
Make Fewer Weekend Trips	No (%) Definitely S N W	No (%) Possibly S N W	Undecided S N W	Yes (%) Fossibly S N w	Yes (%) Definitely
Alter the Means of Getting	18.1 12.3 11.5	16.4 12.6 15.4	12.9 13.1 10.3	38.6 37.9 41.0	S N W
to your Destination	30.0 28.9 29.5	20.6 17.8 15.4	6.5 12.4 3.8		14.0 24.1 21.8 13.5 13.4 6.4
Abandon Weekend Trips	40.8 40.4 26.0	27.2 22.3 36.4	16.6 13.0 13.0		13.5 13.4 6.4
Rearrange Family Budget	24.1 26.6 21.8			40.0 10.0	3.6 8.5 9.1
Make Greater Use of Public Transport for Weekend	1	2010 1017	10.6 17.7 16.7	35.9 28.4 34.6	10.0 7.6 10.3
Trips	38.0 35.2 27.3	15.8 16.3 13.0	4.7 9.8 10.4	25.1 24.6 27.3	16.4 14.0 22.1
Change your Family Car or Convert it to L.P.G.	34.7 47.1 32.9	16.5 71.4 19.7	18.2 17.9 17.1	24.7 12.4 26.3	
Choose a Recreation Destination Closer to	19.4 23 6 10 11	17.1 17.6 19.5		27.7 12.4 20.3	5.9 5.3 3.9
Home	20.7 20.8 10.4	17.1 17.6 19.5	14.7 18.4 13.0	34.1 25.4 35.1	14.7 15.0 22.1

for Sydney and Newcastle are 17 percent and 20 percent respectively. The results show that a severe jolt in fuel prices would have its effect. Almost a half of the total sample would be unwilling or very unwilling to pursue recreational travel at a price double that currently existing (i.e. at 75¢/litre). About a quarter of the sample are undecided in their attitude at that price but an equivalent percentage would be likely to enjoy recreational travel at the same level as before. In other words there is a substantial section of the community where fuel price rises are unlikely to have an effect. The figures presented in Table 10 are interesting in a planning context for they indicate that the effects of such price rises will vary by location, and hence, also by the major destinations from each location.

The occupational groups who would be most unwilling to travel at such a fuel price are clerical, service workers and pensioners. Conversely, those groups willing to pay the much higher price are the professional and administrative categories. Thus the higher the price of fuel the more demonstrable become the effects of income on attitudes and likely behaviour. Similarly those families with three children or more are far more unwilling to undertake recreational trips given a higher price of fuel than those households with no, one or two children.

FUTURE BEHAVIOUR

In the previous section views were canvassed of likely changes in behaviour if the price of fuel was 75 cents a litre today In this section that price of 75 cents a litre is postulated for the end of 1982 and a series of possible behavioural responses to such a price are considered. It has to be stated that such a price looks distinctly more unlikely now than it did at the beginning of the year when the study was formulated thanks to a change in Saudi oil policy. But it could also be stated that there is little certainty of price stability existing for a lengthy period. As such, behavioural responses to possible future prices remain interesting. Seven possible responses were offered to households and these are portrayed in Table 11. Those responses which are unlikely to occur at the considered price, as measured by more than half of the sample are, (i) altering the means of getting to one's destination (50 6 percent - Sydney sample) (ii) abandoning weekend trips altogether (68 percent Sydney, 63 percent Newcastle, 62 percent Wollongong) (iii) making greater use of public transport (54 percent Sydney, 51 percent Newcastle) (iv) changing the family car (51 percent Sydney, 54 percent Newcastle and 52 percent Wollongong). It w appear that despite a considerable rise in fuel price that the majority of the sample will still be making recreation trips, though fewer in number, and still mostly by car. Wollongong residents appear more likely

to switch to rail transport and to choose recreation destinations closer to home.

The only affirmative responses recorded by over half of the sample are: (i) to make fewer trips (53 percent Sydney, 62 percent Newcastle, 63 percent Wollongong) (ii) altering the means of getting to one's destination (51 percent Wollongong) (iii) choosing a recreation destination closer to home (57 percent Wollongong).

Because there are implications for the providers of recreational services it was decided to investigate further the changes in weekend recreation destinations for those who stated they would choose a destination closer to home. These responses given in Table 12 can be compared with those in Table 5. Sydney residents are more likely to stay at other locations in Sydney, on the central coast or in the Blue Mountains. Newcastle residents could be expected to make greater use of Port Stephens and Lake Macquarie, while the Wollongong sample's pattern becomes even more restricted to Sydney and the south coast. In other words those resorts closer to the metropolitan areas are likely to suffer less of a downturn in tourist related activity than those more distant locations. If the price of fuel does rise to that hypothesised, it would also seem that recreational patterns are likely to become less diffuse. It is suggested that areas such as the near and far north coast would lose out on weekend recreational travel both relatively and absolutely.

The responses of those families with children to a possible rearrangement of the family budget to allow recreation trip making if fuel price rose to 75¢/litre were also considered. The previous sections have shown that the larger the family the less likely there will be a continued willingness to take weekend leisure trips. Although there is support for this contention in this analysis the association is only a weak one and there are variations between the three centres. For example, when the increasing size of the family is considered the responses from Sydney showed a trend to be more definite about not considering the possibilities of rearranging the family budget. It would seem that if there are three or more children their budget constraints are already such that it would be very difficult to rearrange money management to allow for weekend leisure trips with an increased fuel price. The pattern for Newcastle is different where the number of children does not seem to matter as to whether there will be no consideration of budgetary changes, but it does matter if there is a possibility that changes may be made to allow for leisure trips even though the price of fuel were to rise to 75¢/litre. Wollongong follows the Newcastle pattern in regard to the unlikely response of budget rearrangement but only

TABLE 12

MOSI LIKELY LOCATION OF WEEKEND RECREATION TRIP IF PRICE OF PETROL RISES TO 75¢/litre

Sample	Location
THAMEON	

DESTINATION	% SYDNEY	% NEWCASTLE	% WOLLONGONG
Lake Macquarie Sydney Hunter Valley Port Stephens Near North Coast Far North Coast Northern Tablelands South Coast Central Coast Western New South Wales Blue Mountains Southern New South Wales Wollongong Newcastle	17 14.8 06 0.6 2.3 0.6 0.0 0.6 91 0.6 51 0.6	8 · 2 0 · 5 3 · 6 6 · 7 2 · 9 0 · 2 0 · 0 3 · 1 0 · 0 0 · 0 0 · 0 0 · 0	0.0 6.3 0.0 0.0 1.3 0.0 0.0 32.9 0.0 0.0 0.0
		·	

TABLE 13

CROSS TABULATION OF OCCUPATION WITH PERCEPTION OF THE ENERGY CRISTS AS REAL

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Professional Administration Clerical Sales Transport Tradesman Labourer Service Pensioner Other	3.3 0.0 7.0 5.6 2.8 6.9 1.9 8.5 2.7 2.0	6.6 7.0 11.6 11.1 11.1 5.3 3.8 22.0 8.8 11.0	3.3 7.0 11.6 13.0 11.1 10.7 11.5 5.1 15.9 14.0	47.3 50.9 55.8 51.9 47.2 57.3 65.4 30.5 47.8	39.6 35.4 14.0 18.5 27.8 19.1 17.3 33.9 24.8
All	6.7	20.1	179	39.5	158

considers the change a definite possibility where there are two children. This latter figure is obviously a weakness in the data.

The implications of the above discussion are that recreation centres which are oriented toward family groups should be concerned, in that if fuel prices were to rise to the equivalent of 75¢/litre then not only would the larger family take fewer trips, generally they would not make any attempt to rearrange the budget to make trips possible, and even if they did it would mean less money available and it has been suggested that nearer centres would be preferred to further centres. More locationally specific inferences may be made. The Wollongong group which favours the south coast are most likely to rearrange their budget to allow for weekend leisure trips. Similarly the Sydney group who have been shown to favour the central and near north coast under these conditions, would also consider, but not definitely, budgeting rearrangement.

ATTITUDES AND PERCEPTIONS

The final section of the survey dealt with the householders view of the energy crisis, as it was considered that this may have influenced the responses. It has already been mentioned that this survey was taken in a "stand-still" time of fuel price rises and it is thought that this may account for some of the differences between responses to this study and the previous ones undertaken by the authors. Table 14 shows the cross tabulation of responses on a five point scale of the attitudes to the seven opinions presented. These opinions were identified from reasons given to open ended questions in the authors' previous studies.

Broadly the results may be summarised into three categories; those which are definitely held by all of those households sampled; those which are held by about half the population, and those in which there are a majority who are undecided or disagree but where there are a substantial percentage (40 percent+) who do hold the opinion. The first group of attitudes about which there is substantial agreement is comprised of the views that the energy crisis is real and will not be over in five years and that more money should be spent on public transport. The second set of attitudes about which people are less definite suggest that self sufficiency may be achieved, that the crisis has been created; while the third set of attitudes is comprised of the views that the present pricing methods are inappropriate and that fuel taxes or rationing are not acceptable alternatives.

In particular situations all centres hold the views that the energy crisis is real with less than 20 percent of the sample disagreeing and less than 10 percent being undecided: all agree or strongly agree

TABLE 14

ATTITUDES AND PERCEPTIONS OF THE ENERGY/FUEL SITUATION IN AUSTRALIA

	S: <u>D:</u>	trong isagr	ly ee	D	isagr	ee	Un	decid	ed		Agree			trong Agree		
	S	N	W	S	N	W	S	N	—— W	S	N	W	s -	N	W	
The Energy Crisis is Real	5.1	3.7	3.8	11.9	6.3	13.9	10.2	10.2	11.4	51.7					-	- E
The Energy Crisis is Created by Govt./Oil Companies	8.6	7.3				17.7								17.1		NW
Australia can Acnieve Self Sufficency in its Oil Needs	2.8	, 4.2	1.3	17.6	17.0	12.7	27.8	32.4	24.1	46.0	34.2	51.9	5.7	12.3	10.1	JUNE KG
The Energy Crisis will be Over in Australia in 5 Years	19.9	34.1	16.7	47.2	38.5	55.1	18.2	19.5	24.4	13.6	5.9	3.8	1.1	2.2	0.0	AN AND
The Current Government Pricing Methods for Fuel is the most Appropriate	18.2	22.5	17.9	25.6	35.5	37.2	20.5	17.6	29.5	30.7	19.1	12.8	5.1	5.1	2.6	
More Money should be Spent on Public Transport in Australia	3.4	3.4	1.3	11.4	7.3	2.5	8.0	8.8	2.5	42.6	37.2	31.6	34.7	43.3	62.0	Ϋ́ΞΥ
Rationing or Taxing Fuel are Acceptable Policies to Reduce Fuel Consumption in Australia	21.0	21.9	21.8	25.0	30.0	32.1	22.7	20.6	23.1	27.8	20.9	17.9	3.4	6.6	5.1	

in the 70-80 percent range (Sydney 73 percent, Newcastle 79 percent, Wollongong 71 percent). All hold equally as strongly that more money should be spent on public transport, though the figures of the combined agree and strongly agree categories for Wollongong, 93.6 percent suggest that other influences may be operating as there is much dissatisfaction in that city with the provision of public transport.

The figures relating to the continuation of the fuel crisis follow a similar pattern with respondents from all centres seeing it as an ongoing situation and with the Wollongong residents being the most extreme in their view and the Sydneysiders least. The extreme and moderate view from the different centres is even more marked in relation to attitudes which consider whether the crisis is an artificially created one, for 63 percent of the Sydney households hold that view Both Newcastle and Wollongong respondents disagree that existing policies, or suggested ones to control the fuel crisis are appropriate/acceptable.

The importance of the attitudes displayed lies not so much in the values but in the effect that such attitudes may have on future behaviour in relation to weekend leisure trips. If most people perceive the energy crisis as a real and ongoing phenomenon, and can be convinced that Australia cannot achieve self-sufficiency then they are liable to alter their behaviour more than has been shown by this survey. Present behaviour is also influenced by the view that somehow the Australian situation is artificially created and present policies will not work to resolve it, therefore we may as well enjoy the situation while we may!

In an attempt to see if there was any bias in the attitudes shown in Table 13, by socio-economic factors, a cross tabulation was made of the perception of the energy crisis as real with occupation (this attitude was chosen as it was generally held by all respondents in all centres). There is remarkably little variation across all occupational groups with only one exception, the service occupations. The only other feature of note is the higher socio-economic occupations, professional and administration, tend to be less undecided than most groups other than service occupations, and correspondingly more positive that there is a real crisis.

CONCLUSION

This paper represents what the authors hope will be the first of a series of studies which will consider the relationship between recreation and rising fuel prices. It has indicated that fuel price rises in the past two years have had limited effects on weekend recreation movement patterns in urban New South Wales

but that these effects vary with the location of the respondent. Where an impact has been felt it has generally been represented by a decrease in the frequency of such trip-making. The results of the study suggest that a major hike in oil prices consistent with those experienced from mid 1978-late 1979 in Australia would have a significant impact on the frequency, location and mode of transport of weekend recreation movement for all socio-economic groups in all three cities studies but especially for larger families.

The authors share a genuine concern that the current (and we believe temporary) lull in oil prices will rock relevant government departments and recreation facility providers into a false slumber and unwarranted sense of security. The authors believe that there is a need to be very specific in our knowledge of how recreation travel might be affected in a high fuel price situation and what the implications will be both for transport operators and facility providers and, thereby, for the resorts which they service. What perhaps is equally worrying is the scanty data that tourism related researchers have to use in Australia. Not enough is known of where domestic tourists go for day trips or for weekends, yet these are trips which are major income generators. Thus it is hard to predict what and where the impacts of rising fuel prices will be when so little is known of existing movement patterns. This paper has attempted to scratch the surface of what we consider are major research deficient areas of tourism and recreation research in Australia.

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